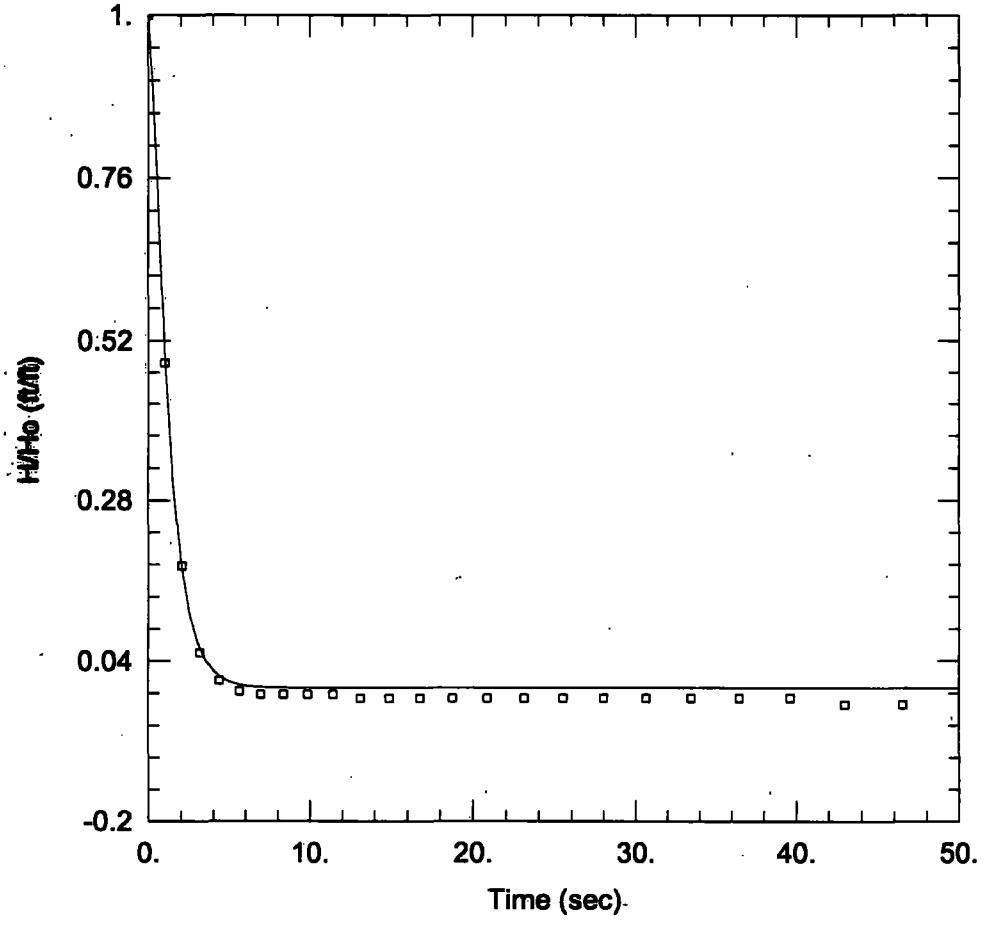


WELL TEST ANALYSIS

Data Set: J:\...\MW-3S SO 1.aqt
Date: 07/17/06 Time: 14:45:38

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3S SO 1
Test Date: 4/5/2006

AQUIFER DATA

Saturated Thickness: 34.5 ft Anisotropy Ratio (Kz/Kr): 1.

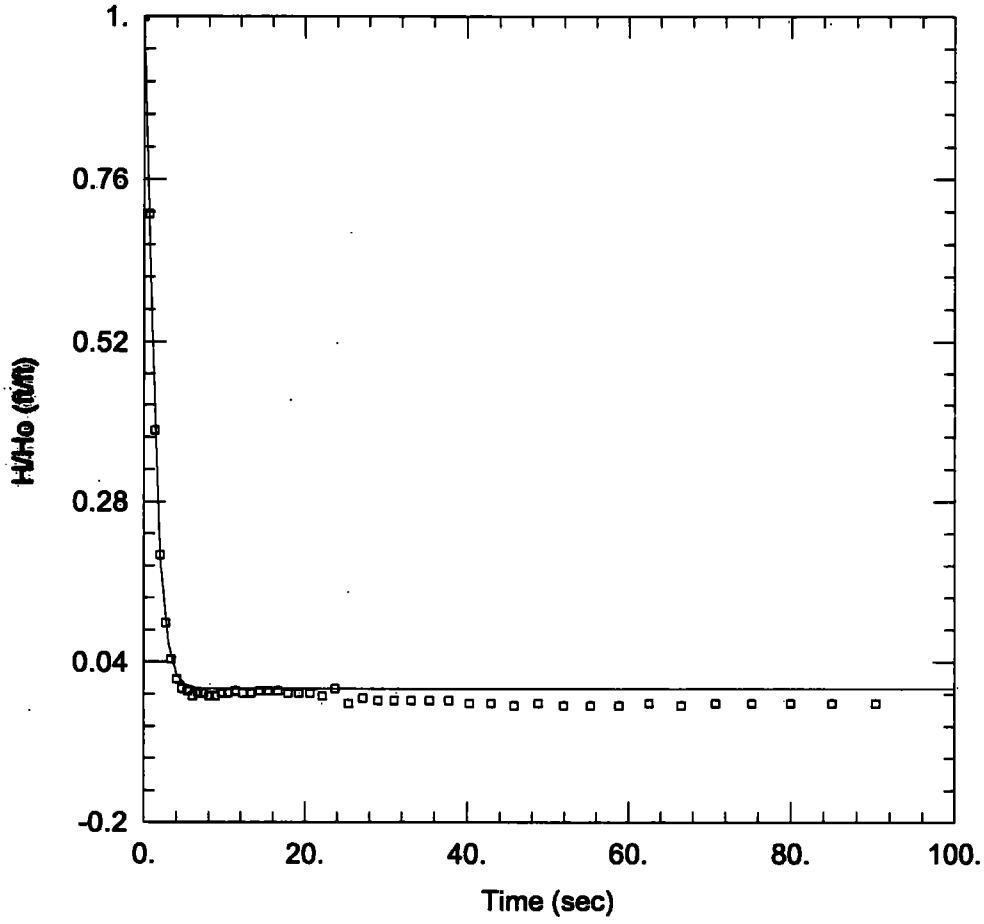
WELL DATA (MW-3S SO 1)

Initial Displacement: 0.826 ft
Total Well Penetration Depth: 13.35 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 13.35 ft
Screen Length: 10. ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 66.55 ft/day Le = 8.279 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3S SO 2.aqt
Date: 08/08/06 Time: 13:02:38

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3S SO 2
Test Date: 4/13/2006

AQUIFER DATA

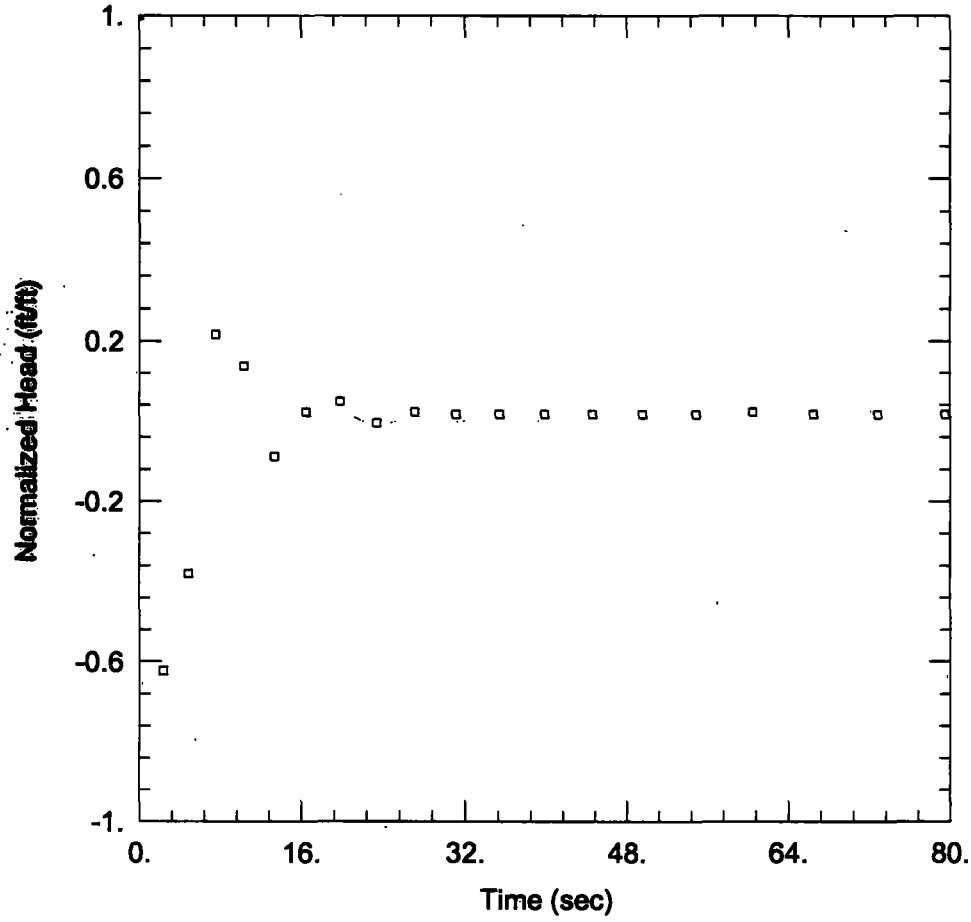
Saturated Thickness: 34.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-3S SO 2)

Initial Displacement: 1.179 ft
Total Well Penetration Depth: 13.14 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 13.14 ft
Screen Length: 10. ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 63.57 ft/day
Le = 12.19 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SI 1.aqt
Date: 07/10/06 Time: 10:36:17

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SI 1
Test Date: 4/5/2006

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

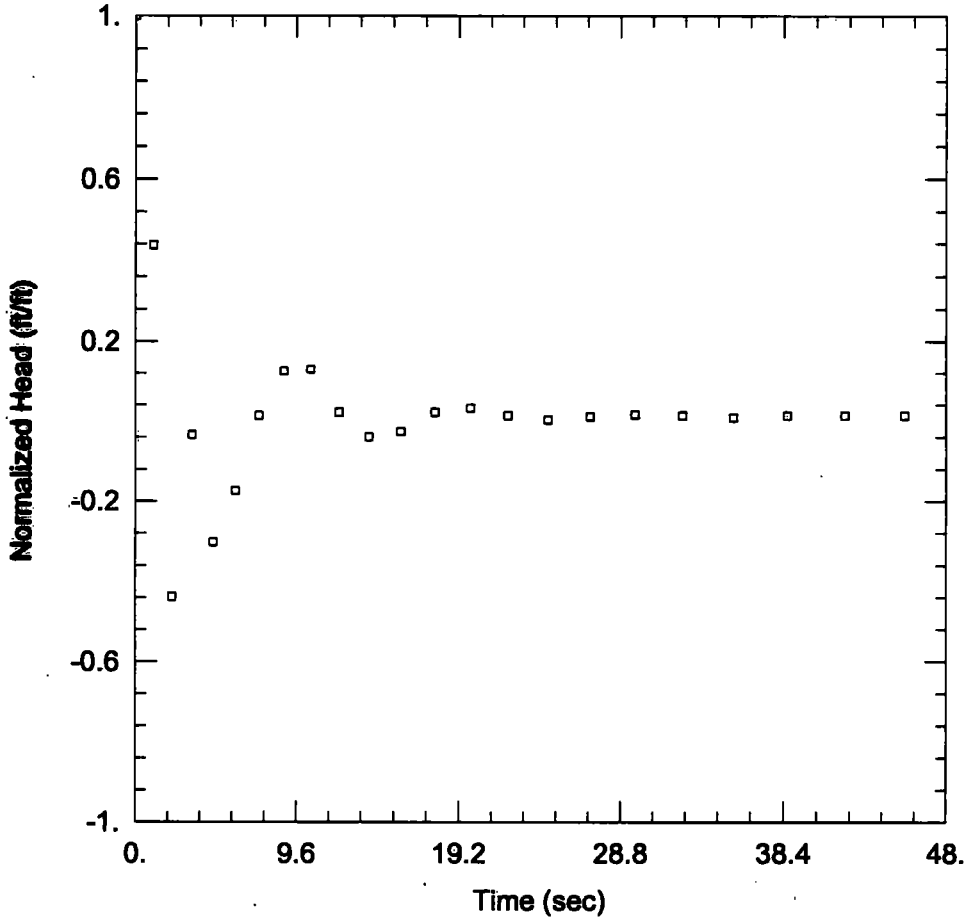
WELL DATA (MW-3D SI 1)

Initial Displacement: 0.811 ft
Total Well Penetration Depth: 73.68 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.68 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar

K = 114.3 ft/day
Le = 34.88 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SI 2.aqt
Date: 07/10/06 Time: 10:36:07

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SI 2
Test Date: 4/7/2006

AQUIFER DATA

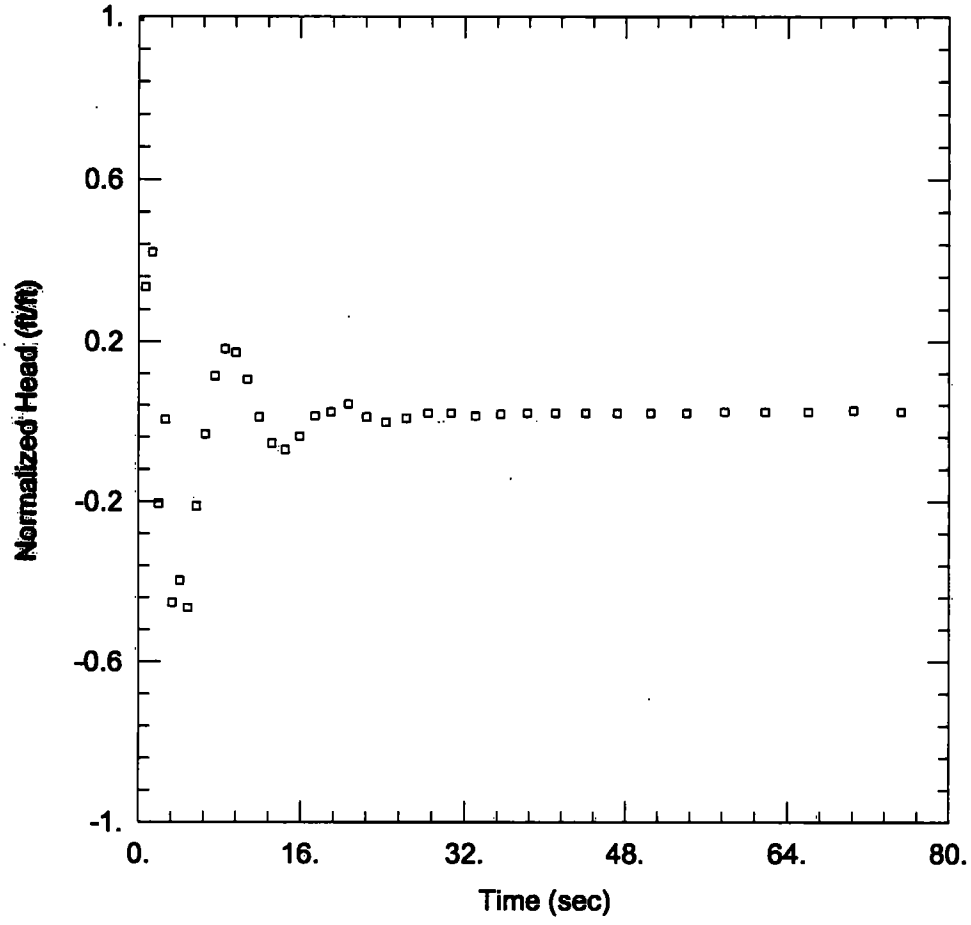
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-3D SI 2)

Initial Displacement: 1.611 ft
Total Well Penetration Depth: 73.53 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.53 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 86.77 ft/day
Le = 14.81 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SI 3.aqt
Date: 07/10/06 Time: 10:35:59

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SI 3
Test Date: 4/10/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

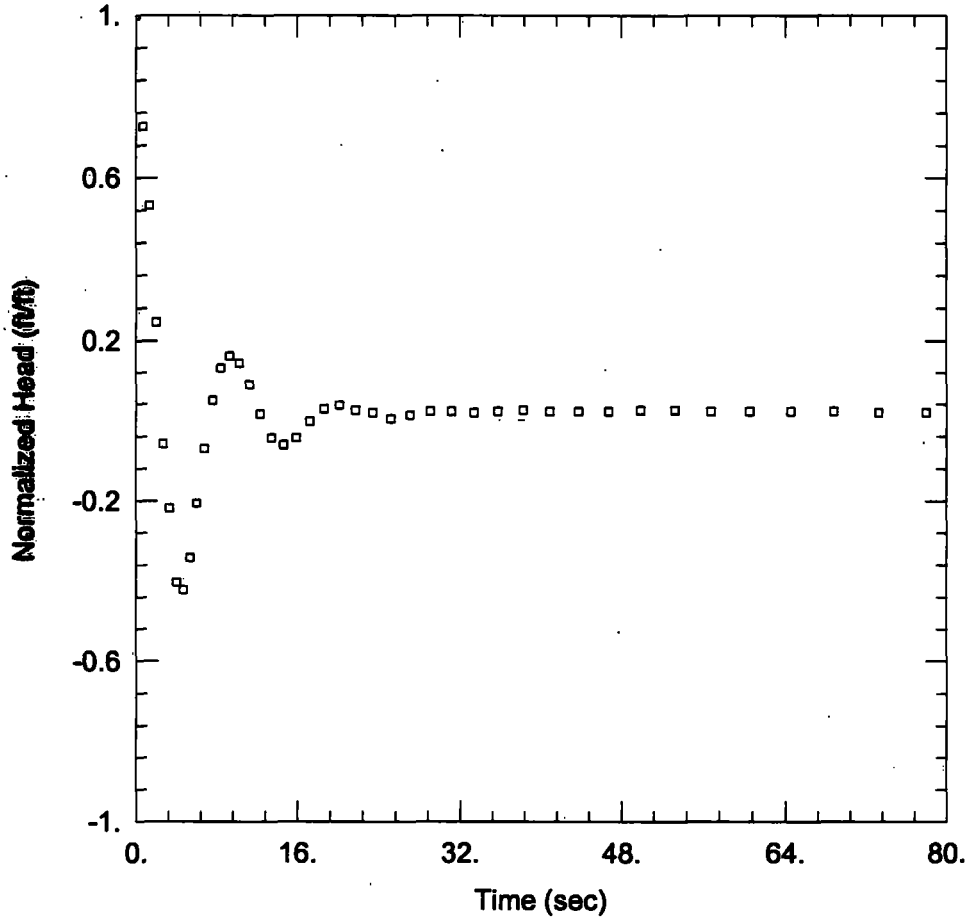
WELL DATA (MW-3D SI 3)

Initial Displacement: 1.317 ft
Total Well Penetration Depth: 73.69 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.69 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 77.39 ft/day Le = 49.85 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SI 4.aqt
Date: 07/10/06 Time: 10:35:51

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SI 4
Test Date: 4/13/2006

AQUIFER DATA

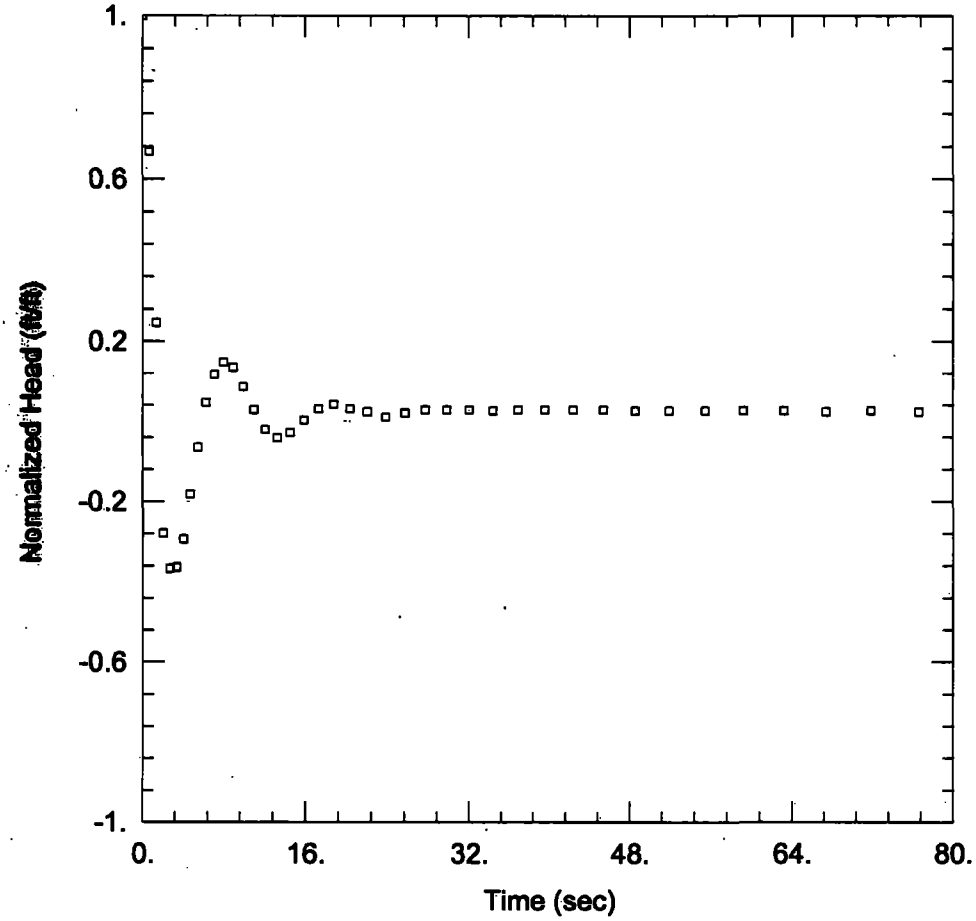
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-3D SI 4)

Initial Displacement: 1.396 ft
Total Well Penetration Depth: 73.46 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.46 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 64.19 ft/day
Le = 61.28 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SI 5.aqt
Date: 07/10/06 Time: 10:35:44

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SI 5
Test Date: 4/13/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

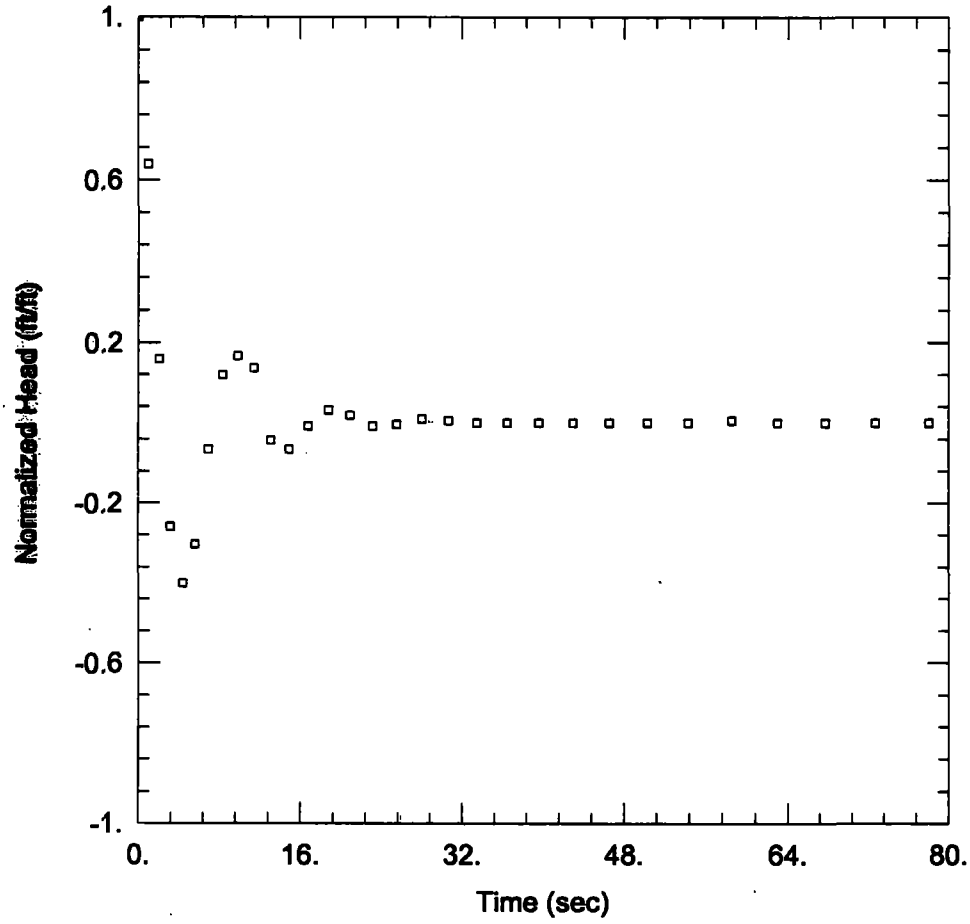
WELL DATA (MW-3D SI 5)

Initial Displacement: 1.653 ft
Total Well Penetration Depth: 73.46 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.46 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 83.36 ft/day Le = 29.01 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SO 1.aqt
Date: 07/10/06 Time: 10:35:34

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SO 1
Test Date: 4/5/2006

AQUIFER DATA

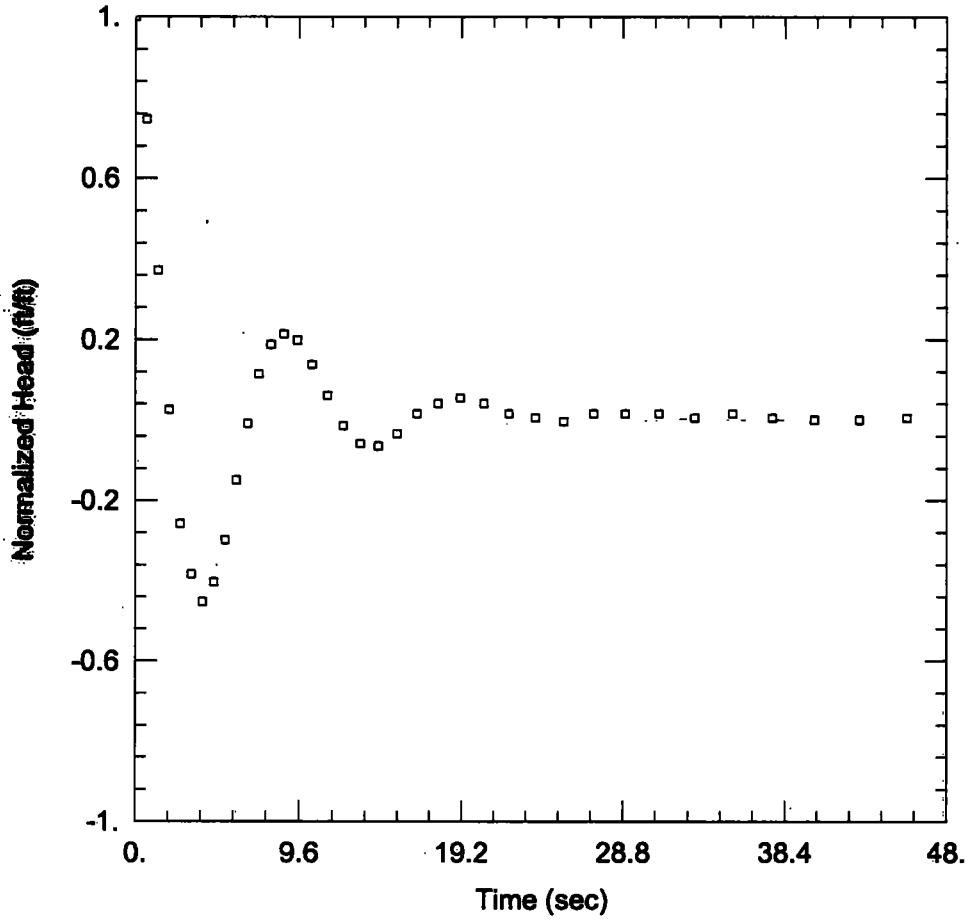
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-3D SO 1)

Initial Displacement: 0.973 ft
Total Well Penetration Depth: 73.68 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.68 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 66.55 ft/day
Le = 61.69 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SO 2.aqt
Date: 07/10/06 Time: 10:35:24

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SO 2
Test Date: 4/7/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

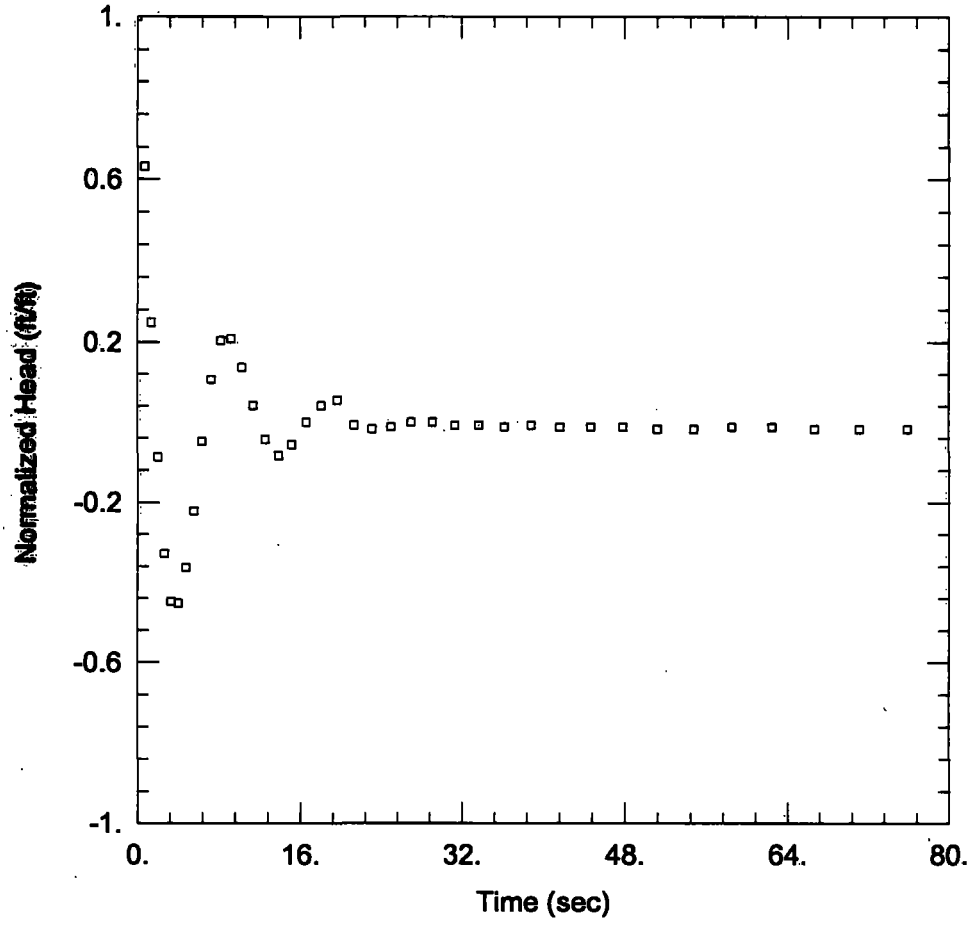
WELL DATA (MW-3D SO 2)

Initial Displacement: 0.864 ft
Total Well Penetration Depth: 73.53 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.53 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 79.87 ft/day Le = 51.36 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SO 3.aqt
Date: 07/10/06 Time: 10:35:16

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SO 3
Test Date: 4/10/2006

AQUIFER DATA

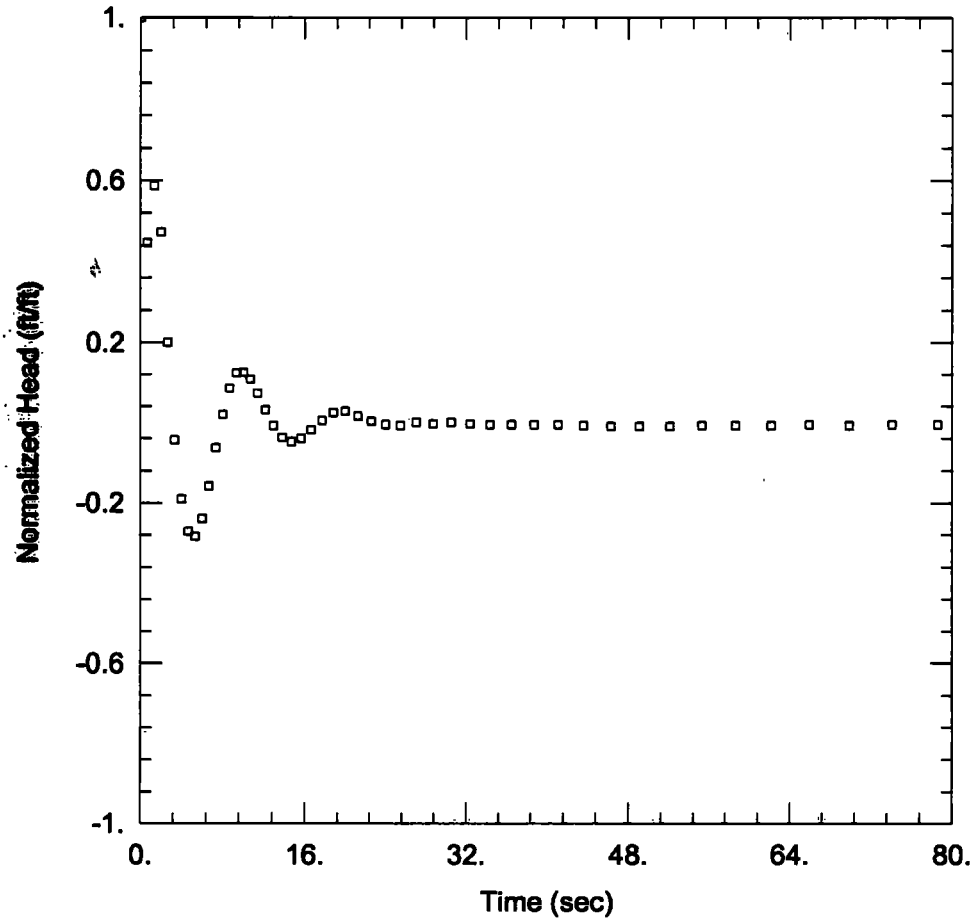
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-3D SO 3)

Initial Displacement: 0.966 ft
Total Well Penetration Depth: 73.69 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.69 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 83.96 ft/day
Le = 45.61 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SO 4.aqt
Date: 07/10/06 Time: 10:35:07

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SO 4
Test Date: 4/13/2006

AQUIFER DATA

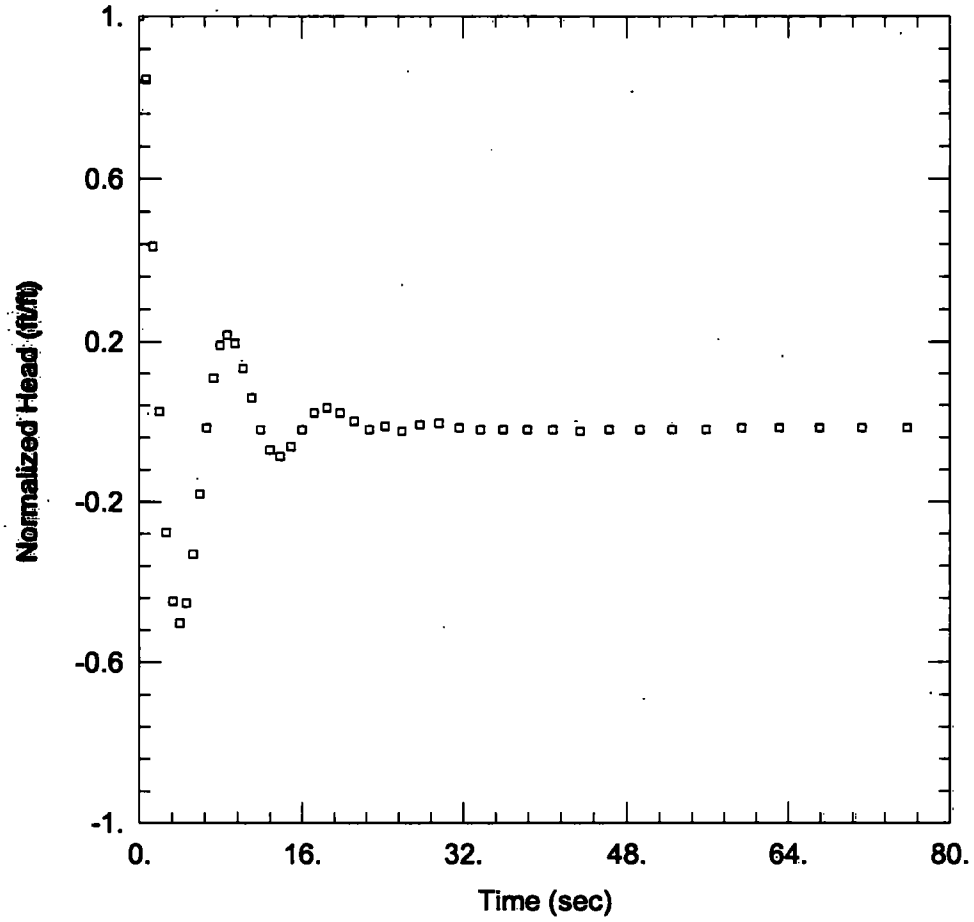
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-3D SO 4)

Initial Displacement: 2.027 ft
Total Well Penetration Depth: 73.46 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.46 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 44.71 ft/day
Le = 70.13 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-3D SO 5.aqt
Date: 07/10/06 Time: 10:34:56

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-3D SO 5
Test Date: 4/13/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

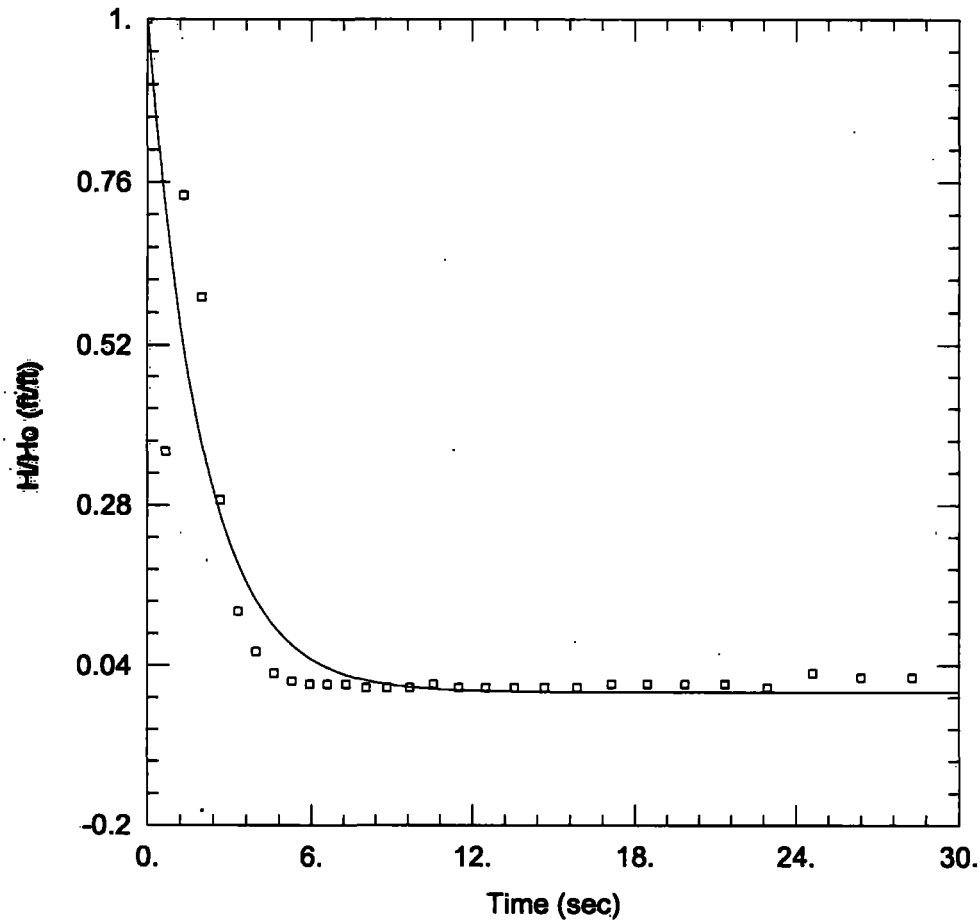
WELL DATA (MW-3D SO 5)

Initial Displacement: 1.026 ft
Total Well Penetration Depth: 73.46 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 73.46 ft
Screen Length: 20. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 85.36 ft/day Le = 53.2 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-4S SI 2.aqt
Date: 07/17/06 Time: 16:49:14

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-4S SI 2
Test Date: 4/7/2006

AQUIFER DATA

Saturated Thickness: 34.5 ft Anisotropy Ratio (Kz/Kr): 1.

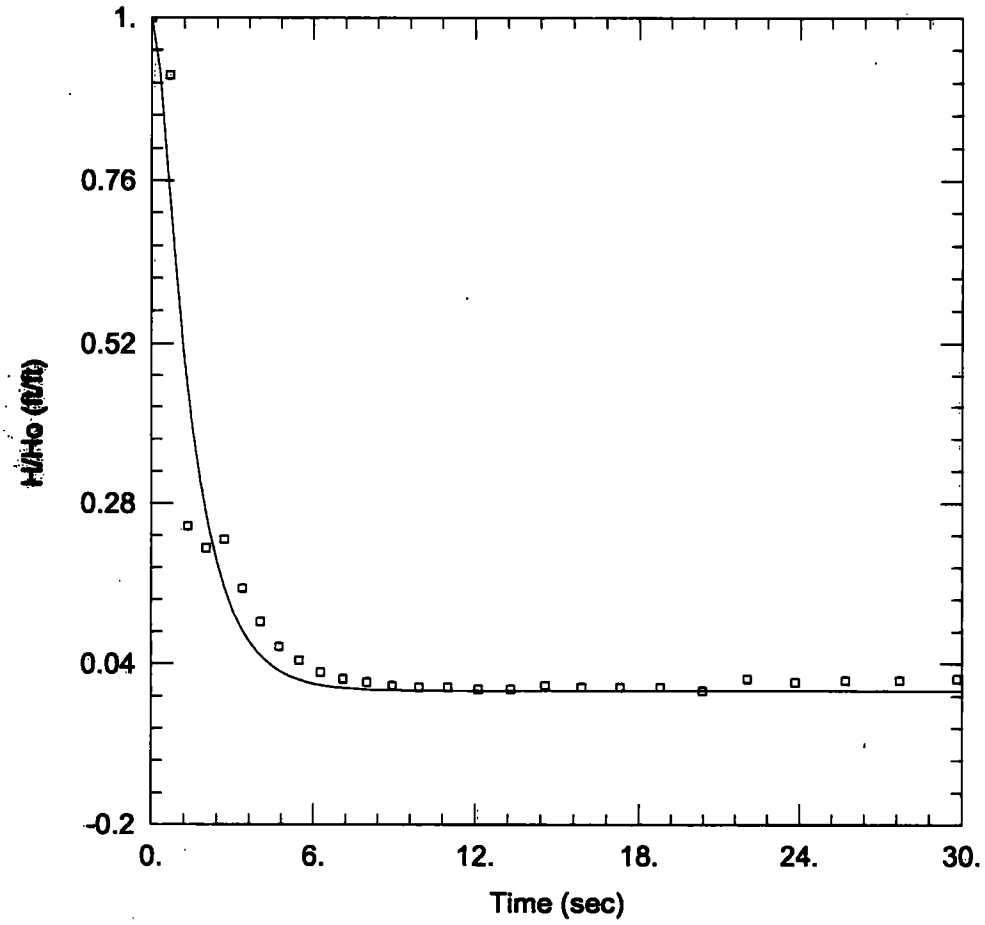
WELL DATA (MW-4S SI 2)

Initial Displacement: 0.775 ft
Total Well Penetration Depth: 8.15 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.15 ft
Screen Length: 8.15 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 45.77 ft/day Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-4S SI 3.aqt
Date: 07/17/06 Time: 16:49:41

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-4S SI 3
Test Date: 4/12/2006

AQUIFER DATA

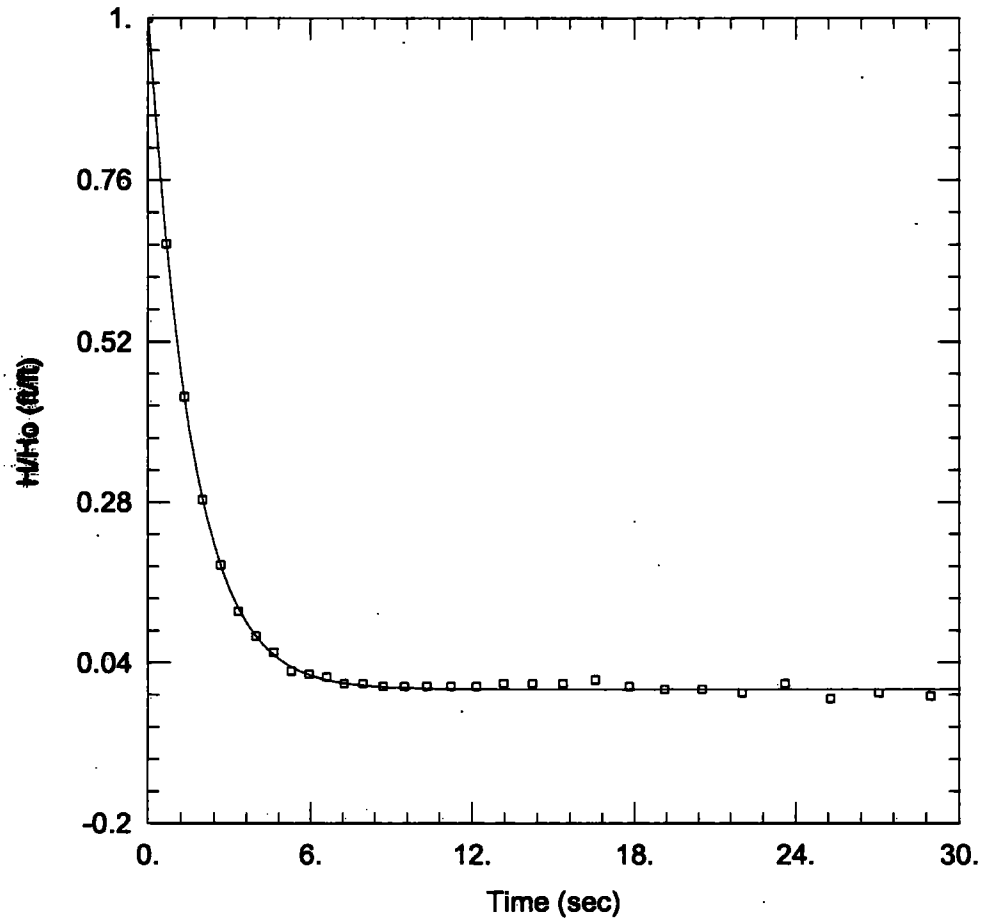
Saturated Thickness: 34.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-4S SI 3)

Initial Displacement: 1.709 ft
Total Well Penetration Depth: 8.18 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.18 ft
Screen Length: 8.18 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 58.76 ft/day
Le = 12.26 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-4S SO 2.aqt
Date: 07/17/06 Time: 16:50:08

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-4S SO 2
Test Date: 4/5/2006

AQUIFER DATA

Saturated Thickness: 34.5 ft Anisotropy Ratio (Kz/Kr): 1.

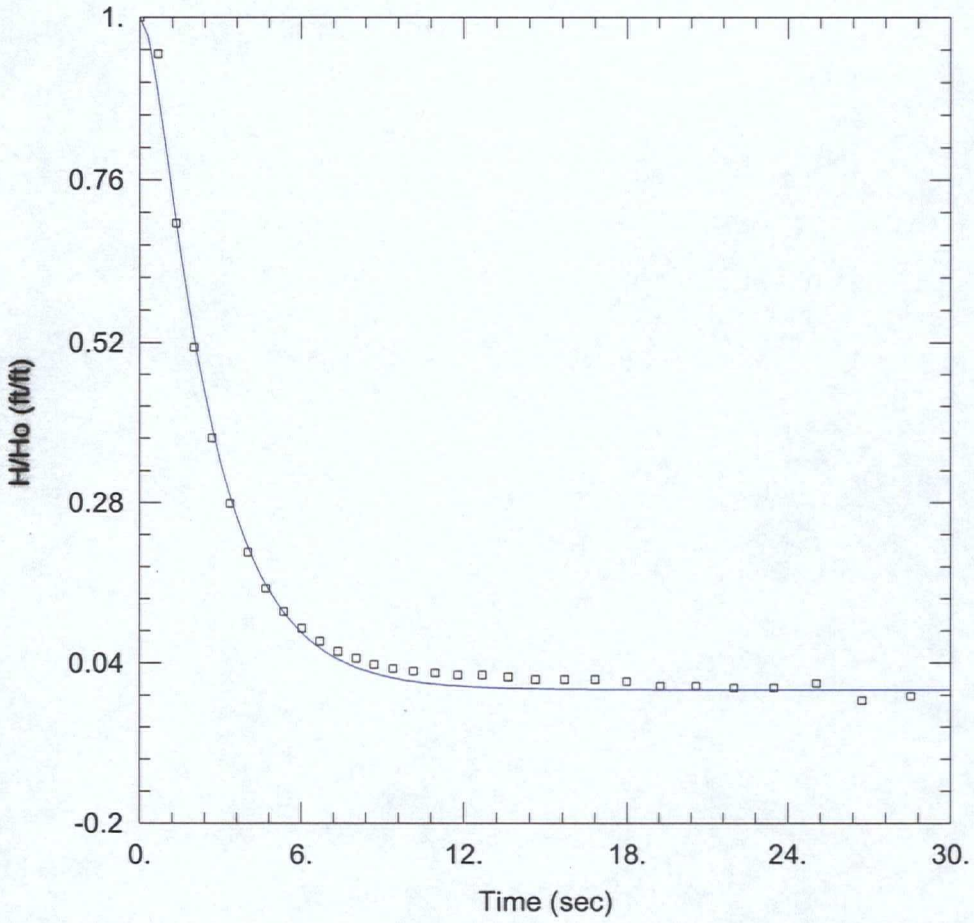
WELL DATA (MW-4S SO 2)

Initial Displacement: 0.92 ft
Total Well Penetration Depth: 8.15 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.15 ft
Screen Length: 8.15 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 57.82 ft/day Le = 1.553 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-4S SO 3.aqt
Date: 07/17/06 Time: 16:50:27

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-4S SO 3
Test Date: 4/12/2006

AQUIFER DATA

Saturated Thickness: 34.5 ft
Anisotropy Ratio (Kz/Kr): 1.

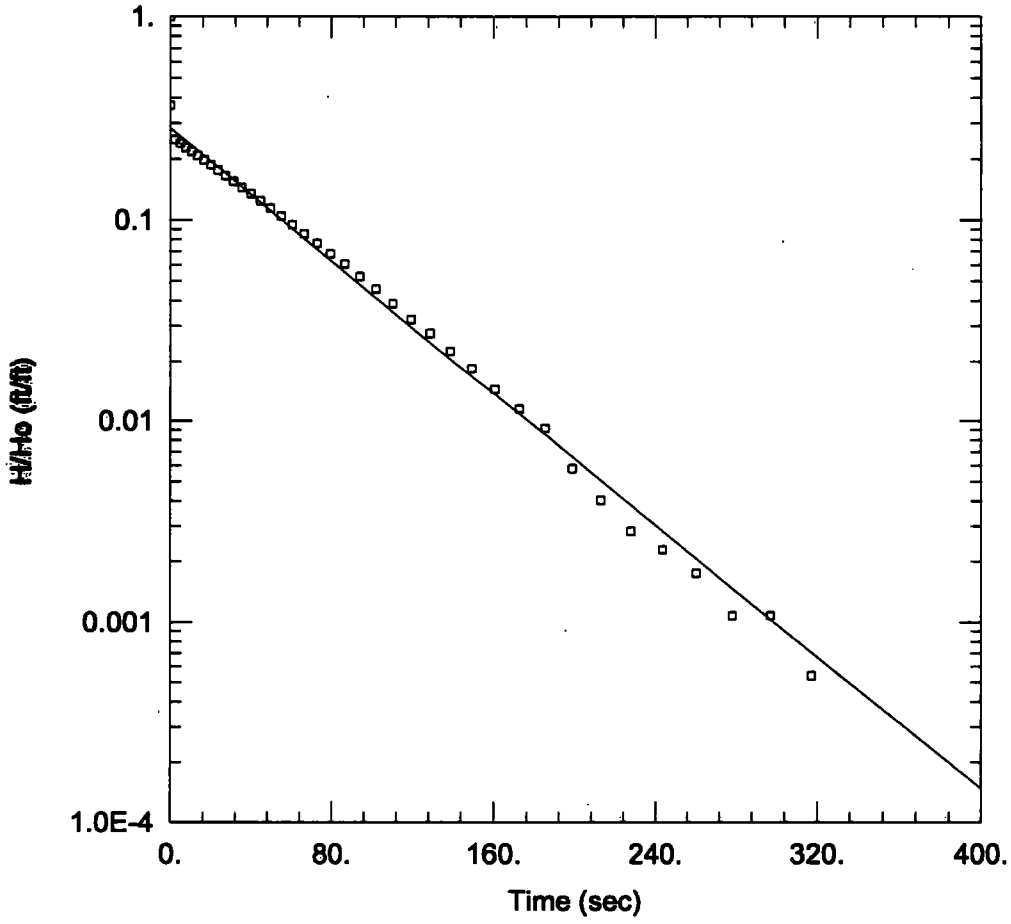
WELL DATA (MW-4S SO 3)

Initial Displacement: 1.353 ft
Total Well Penetration Depth: 8.18 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.18 ft
Screen Length: 8.18 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar

K = 33.2 ft/day
Le = 39.45 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-4M SI 1.aqt
Date: 07/10/06 Time: 10:40:20

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-4M SI 1
Test Date: 4/5/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

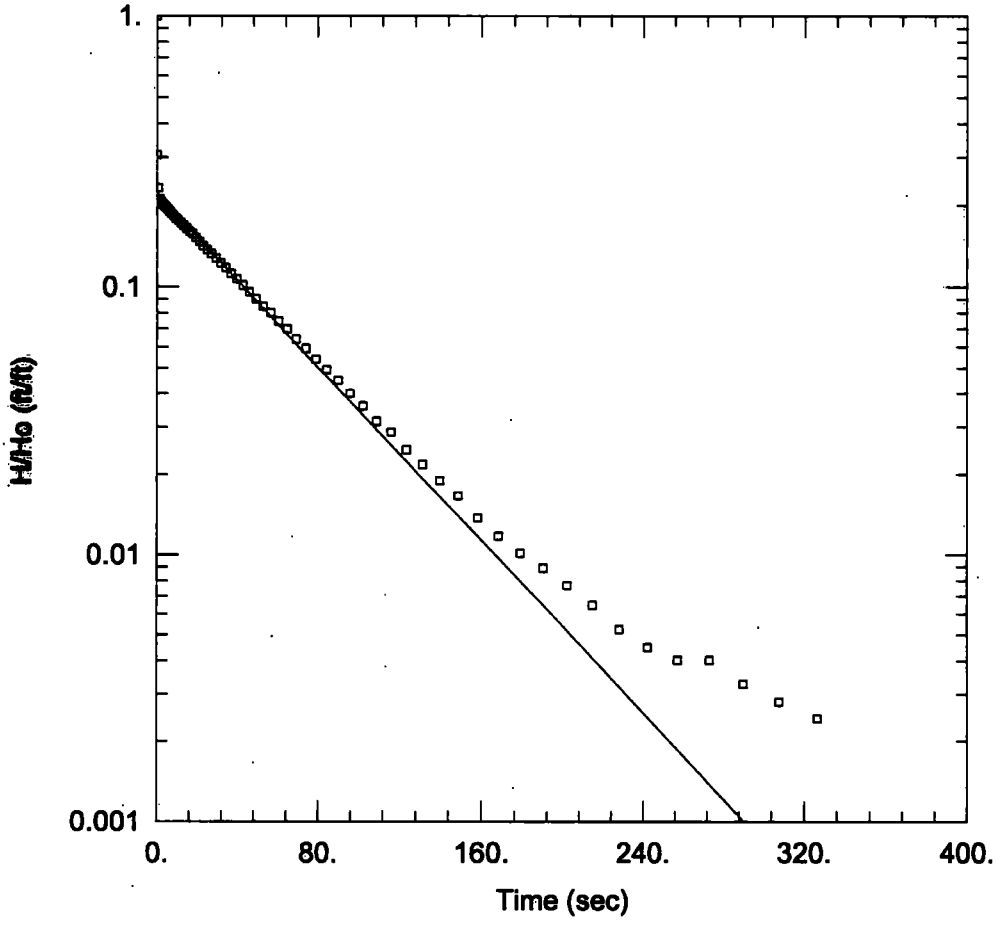
WELL DATA (MW-4M SI 1)

Initial Displacement: 2.723 ft
Total Well Penetration Depth: 42.78 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 42.78 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 1.127 ft/day y0 = 0.7721 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-4M SI 2.aqt
Date: 07/10/06 Time: 10:40:13

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-4M SI 2
Test Date: 4/12/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

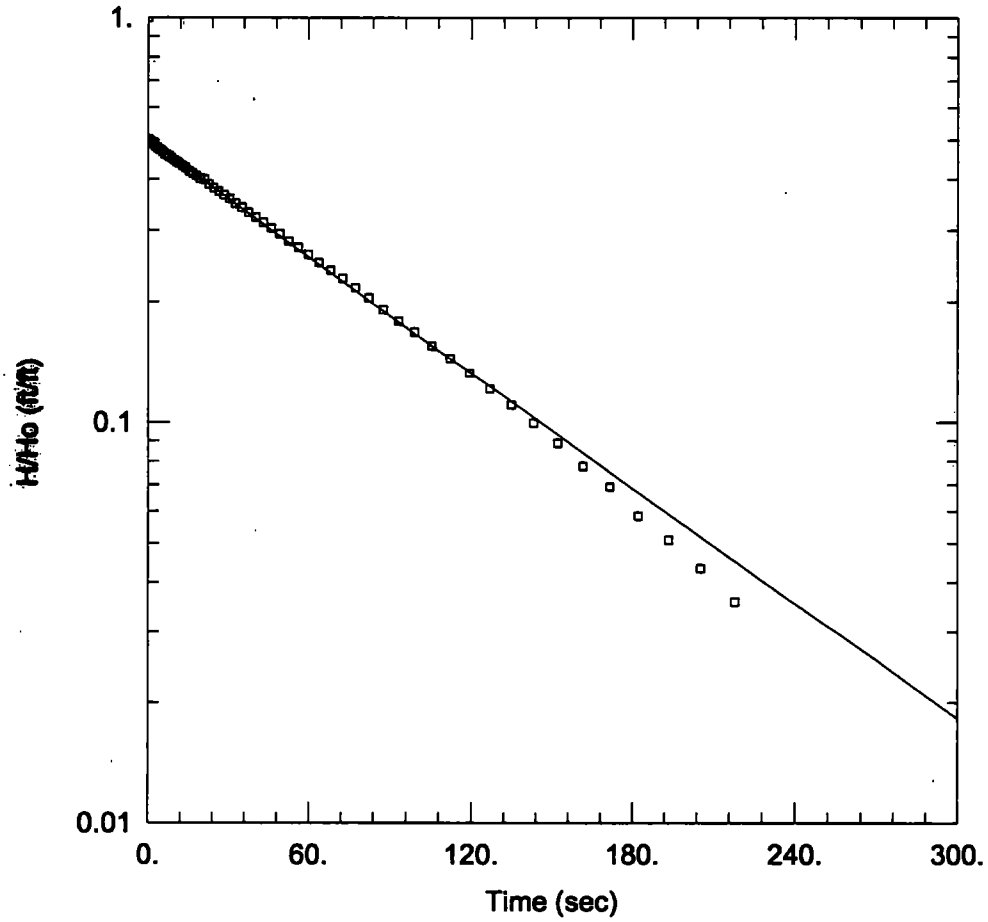
WELL DATA (MW-4M SI 2)

Initial Displacement: 3.266 ft
Total Well Penetration Depth: 42.59 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 42.59 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 1.129 ft/day y0 = 0.7248 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-4M SO 1.aqt
Date: 07/10/06 Time: 10:40:05

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-4M SO 1
Test Date: 4/5/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

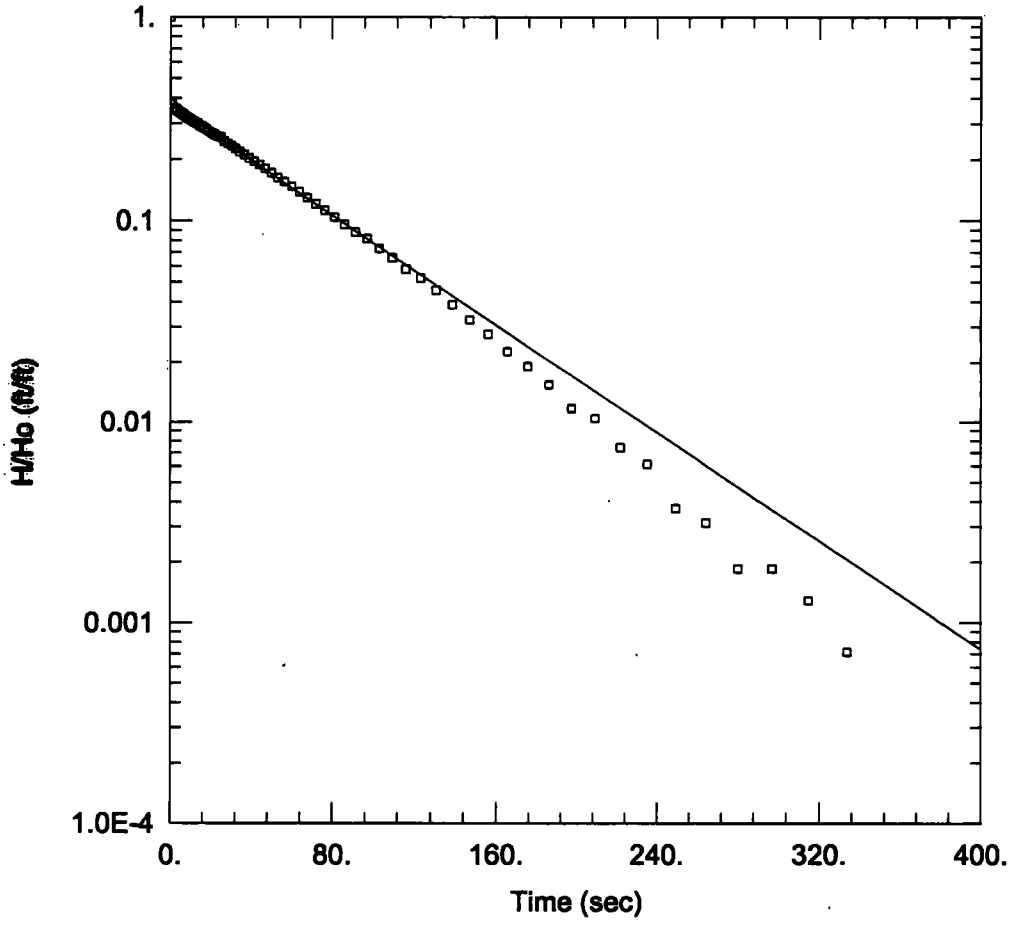
WELL DATA (MW-4M SO 1)

Initial Displacement: 1.993 ft
Total Well Penetration Depth: 42.78 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 42.78 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.8984 ft/day y0 = 0.9932 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-4M SO 2.aqt
Date: 07/10/06 Time: 12:12:27

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-4M SO 2
Test Date: 4/12/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

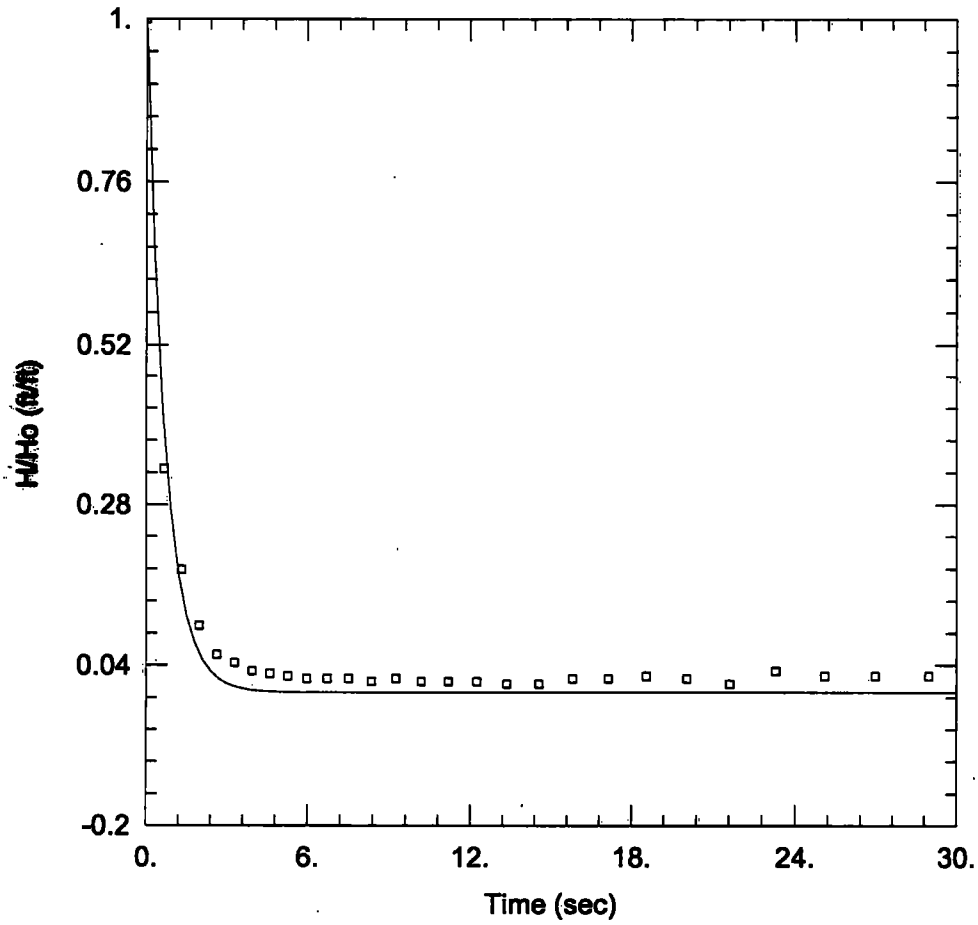
WELL DATA (MW-4M SO 2)

Initial Displacement: 2.648 ft
Total Well Penetration Depth: 42.59 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 42.59 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 1.162 ft/day y0 = 0.9744 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6S SI 1.aqt
Date: 07/17/06 Time: 14:47:51

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6S SI 1
Test Date: 4/7/2006

AQUIFER DATA

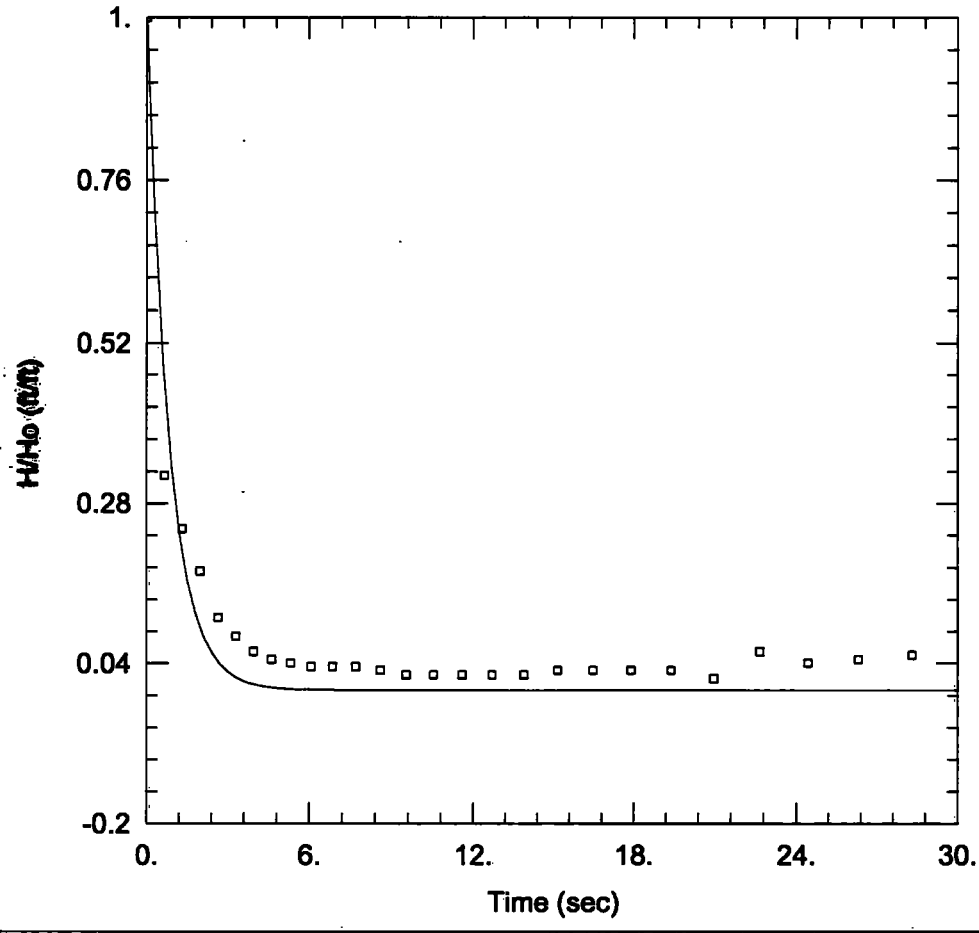
Saturated Thickness: 16. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6S SI 1)

Initial Displacement: 1.079 ft
Total Well Penetration Depth: 6.08 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.08 ft
Screen Length: 6.08 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 163. ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6S SI 2.aqt
Date: 07/17/06 Time: 14:48:15

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6S SI 2
Test Date: 4/12/2006

AQUIFER DATA

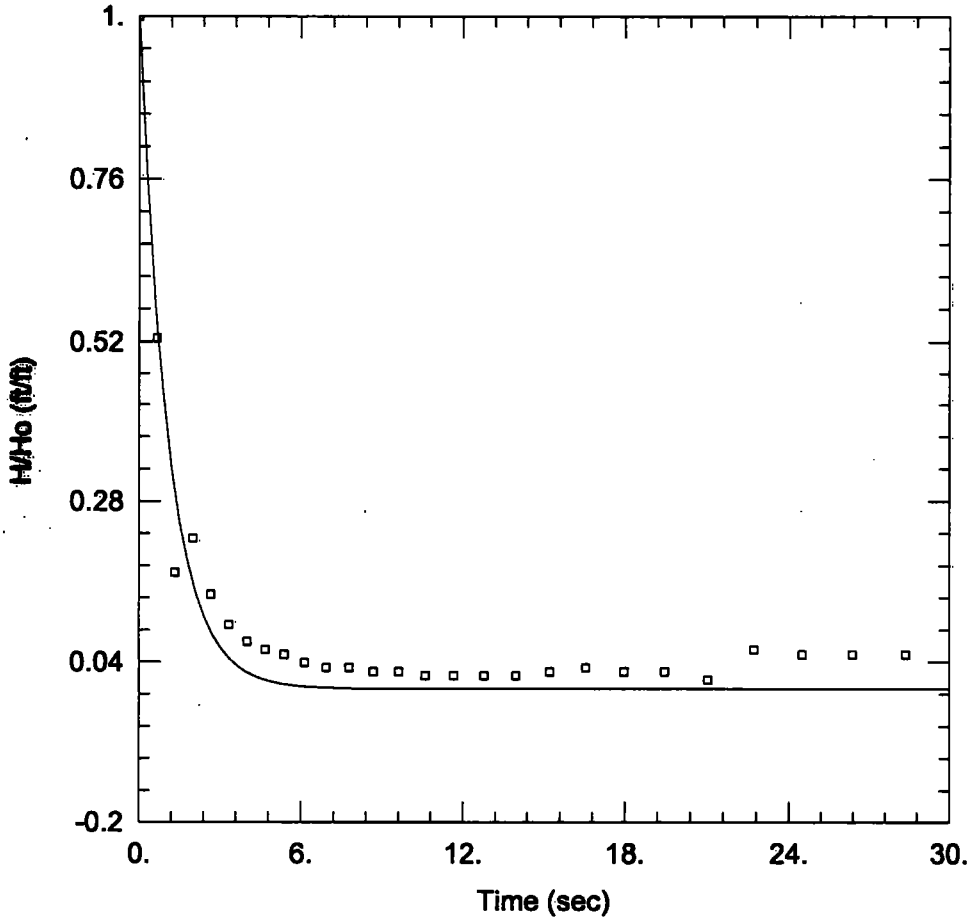
Saturated Thickness: 16. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6S SI 2)

Initial Displacement: 0.745 ft
Total Well Penetration Depth: 6.05 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.05 ft
Screen Length: 6.05 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 136. ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6S SI 3.aqt
Date: 07/17/06 Time: 14:48:42

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6S SI 3
Test Date: 4/12/2006

AQUIFER DATA

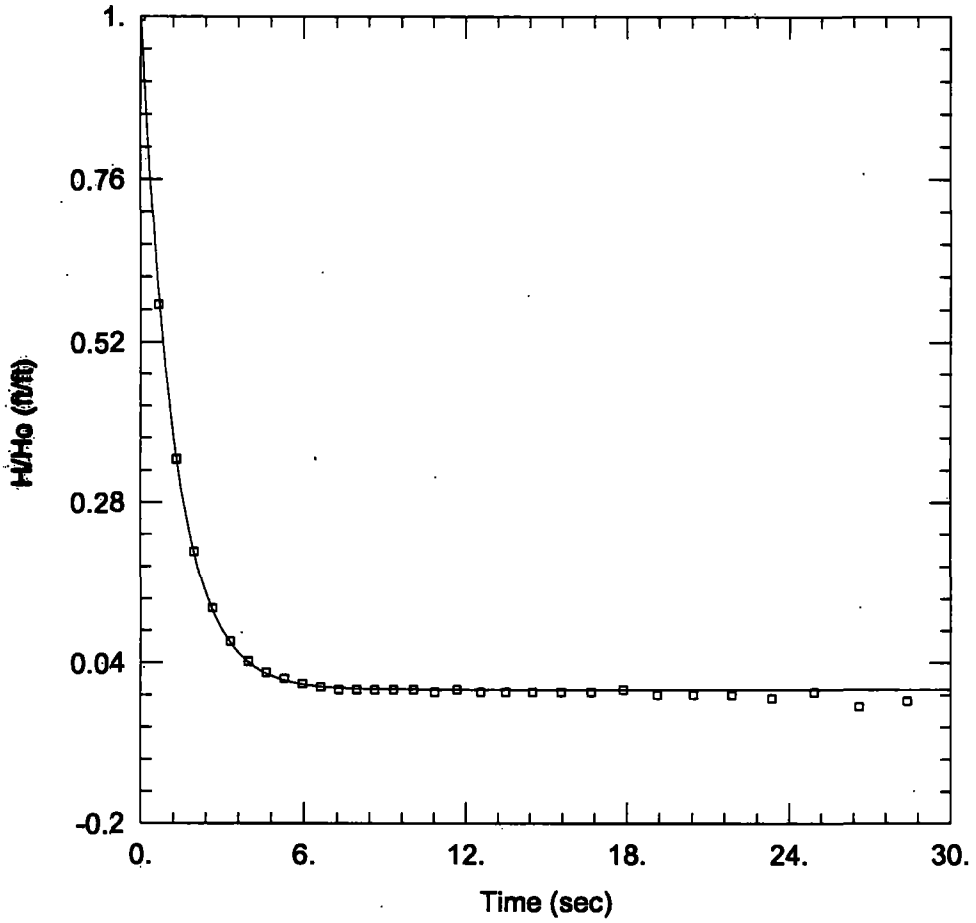
Saturated Thickness: 16. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6S SI 2)

Initial Displacement: 0.668 ft
Total Well Penetration Depth: 6.05 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.05 ft
Screen Length: 6.05 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 105. ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6S SO 1.aqt
Date: 07/17/06 Time: 14:49:07

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6S SO 1
Test Date: 4/7/2006

AQUIFER DATA

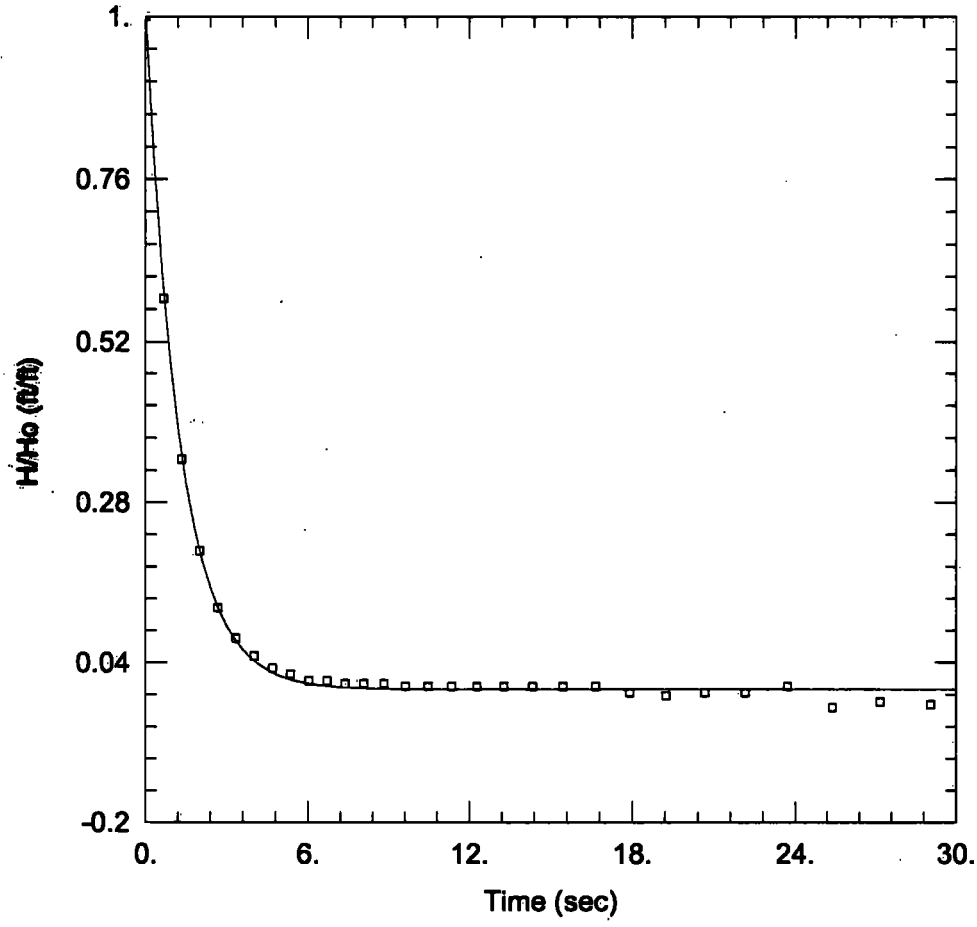
Saturated Thickness: 16. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6S SO 1)

Initial Displacement: 1.019 ft
Total Well Penetration Depth: 6.08 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.08 ft
Screen Length: 6.08 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 91.55 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6S SO 2.aqt
Date: 07/17/06 Time: 14:49:30

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6S SO 2
Test Date: 4/12/2006

AQUIFER DATA

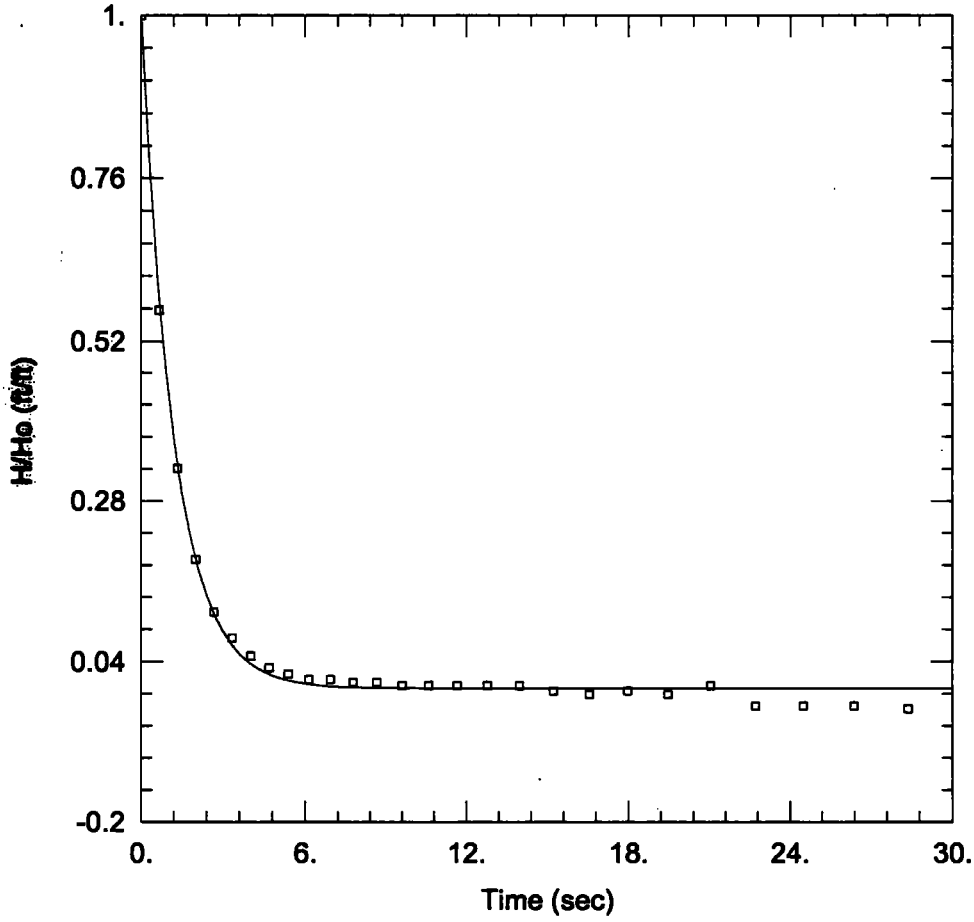
Saturated Thickness: 16. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6S SO 2)

Initial Displacement: 0.945 ft
Total Well Penetration Depth: 6.05 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.05 ft
Screen Length: 6.05 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 89.27 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6S SO 3.aqt
Date: 07/17/06 Time: 14:50:00

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6S SO 3
Test Date: 4/12/2006

AQUIFER DATA

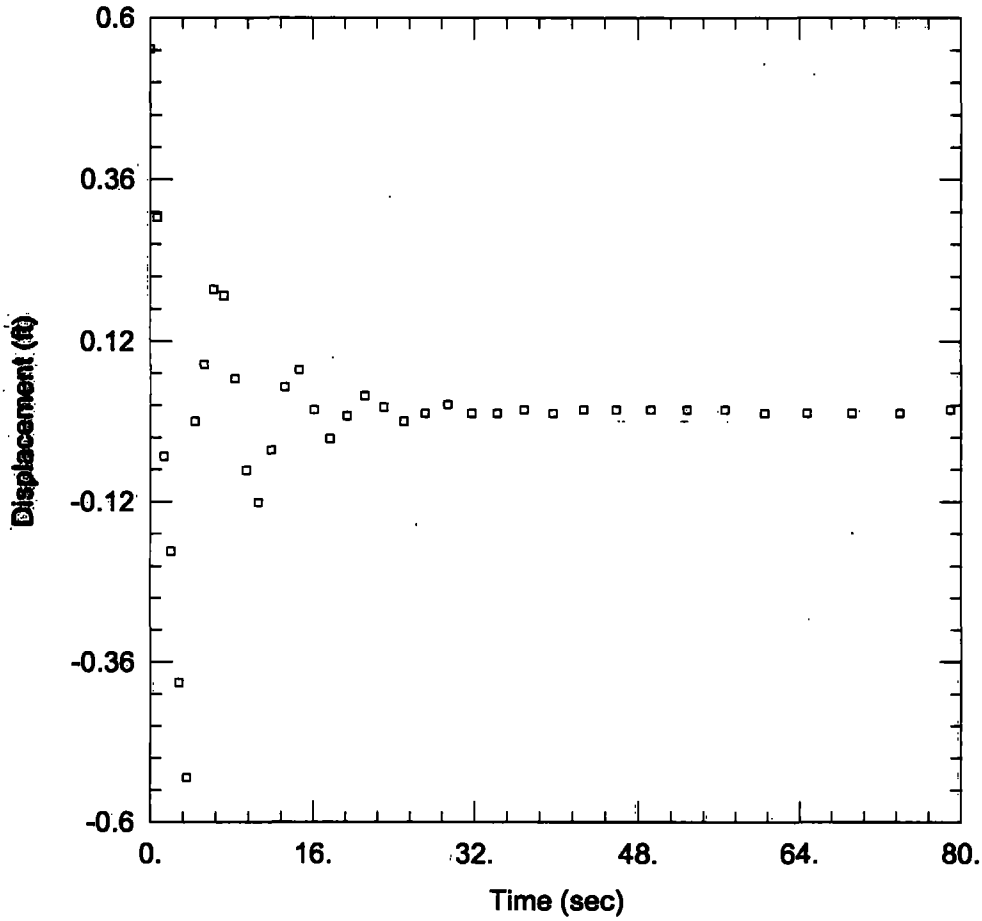
Saturated Thickness: 16. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6S SO 3)

Initial Displacement: 0.976 ft
Total Well Penetration Depth: 6.05 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.05 ft
Screen Length: 6.05 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 93.3 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6M SI 1.aqt
Date: 07/10/06 Time: 10:42:47

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6M SI 1
Test Date: 4/7/2006

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

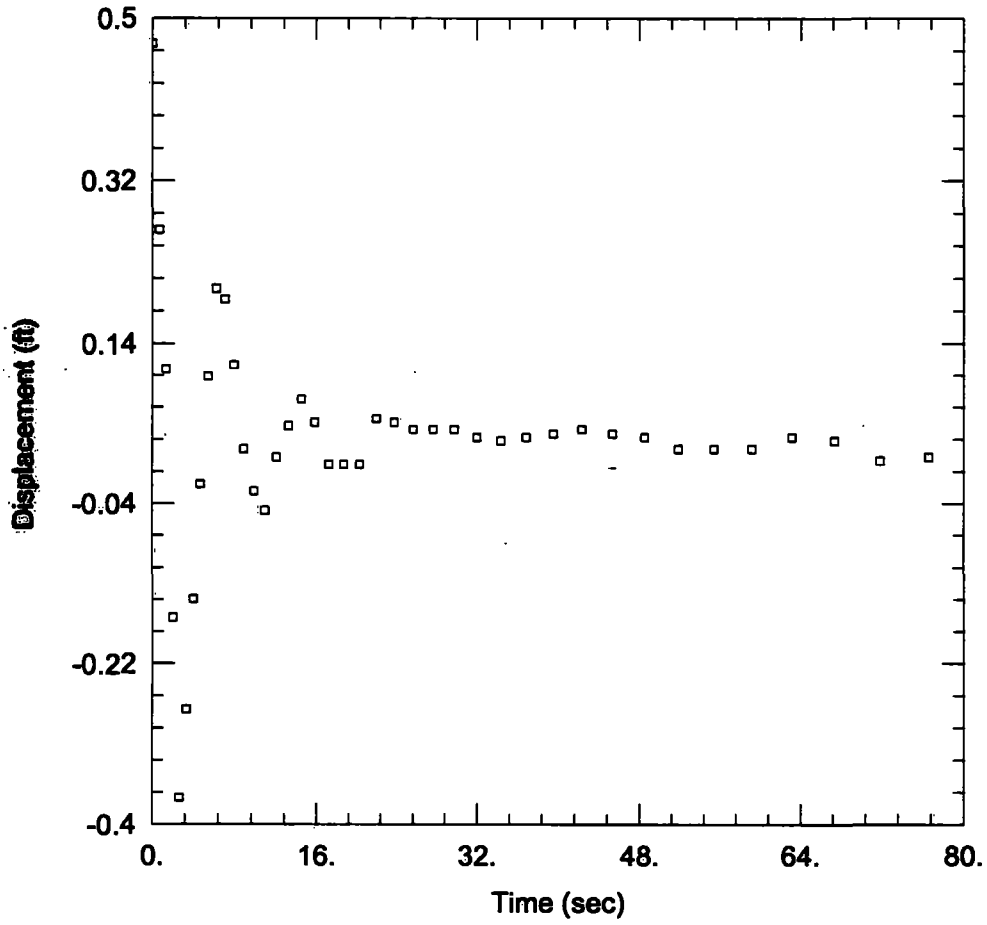
WELL DATA (MW-6M SI 1)

Initial Displacement: 0.554 ft
Total Well Penetration Depth: 40. ft
Casing Radius: 0.0833 ft
Static Water Column Height: 40. ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar

K = 266.1 ft/day
Le = 33.18 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6M SI 2.aqt
Date: 07/10/06 Time: 10:42:32

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6M SI 2
Test Date: 4/13/2006

AQUIFER DATA

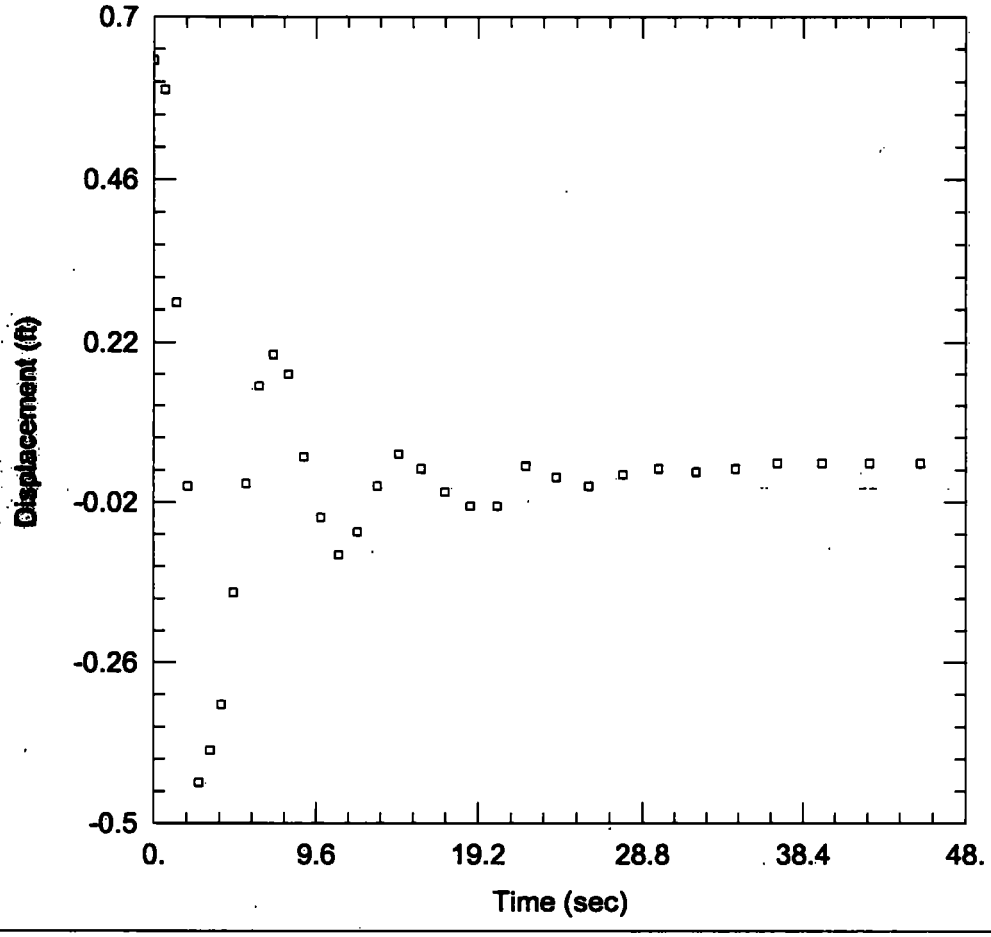
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6M SI 2)

Initial Displacement: 0.472 ft
Total Well Penetration Depth: 39.92 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 39.92 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 228.7 ft/day
Le = 31.86 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6M SI 3.aqt
Date: 07/10/06 Time: 10:42:20

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6M SI 3
Test Date: 4/13/2006

AQUIFER DATA

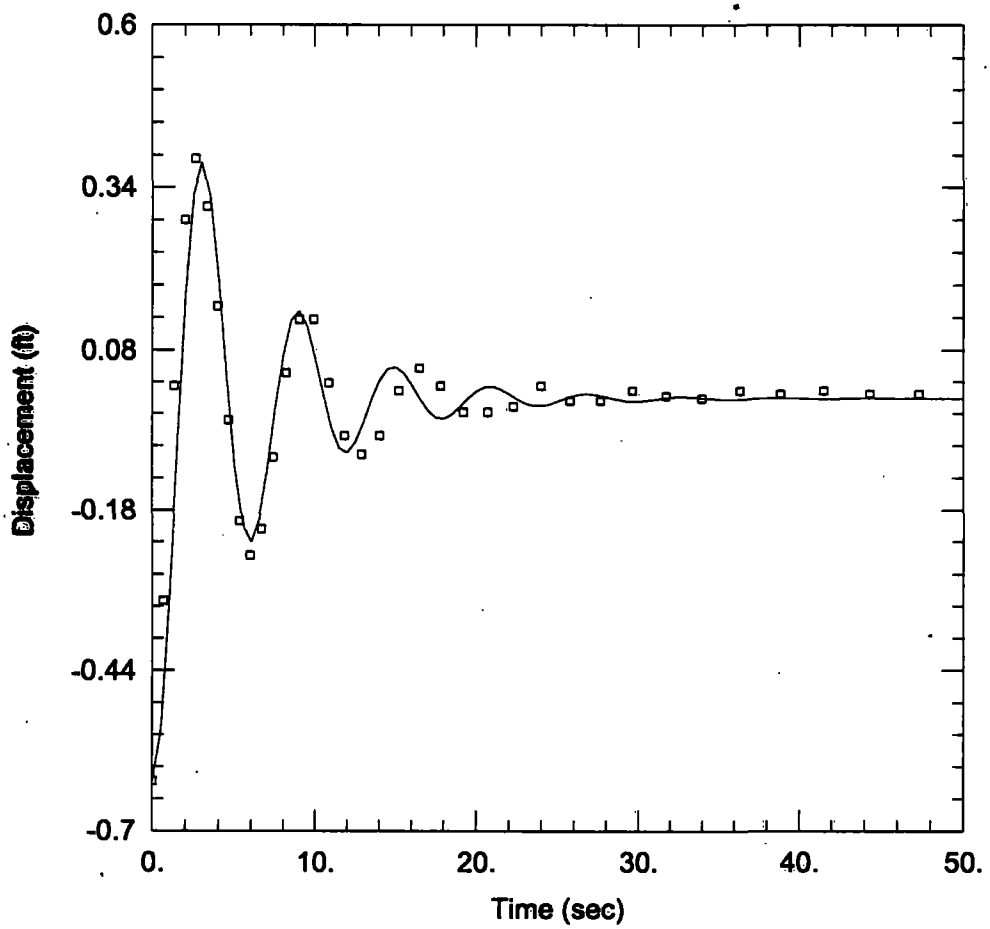
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6M SI 3)

Initial Displacement: 0.636 ft
Total Well Penetration Depth: 39.92 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 39.92 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 200.2 ft/day
Le = 39. ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6M SO 1.aqt
Date: 07/10/06 Time: 10:42:07

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6M SO 1
Test Date: 4/7/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

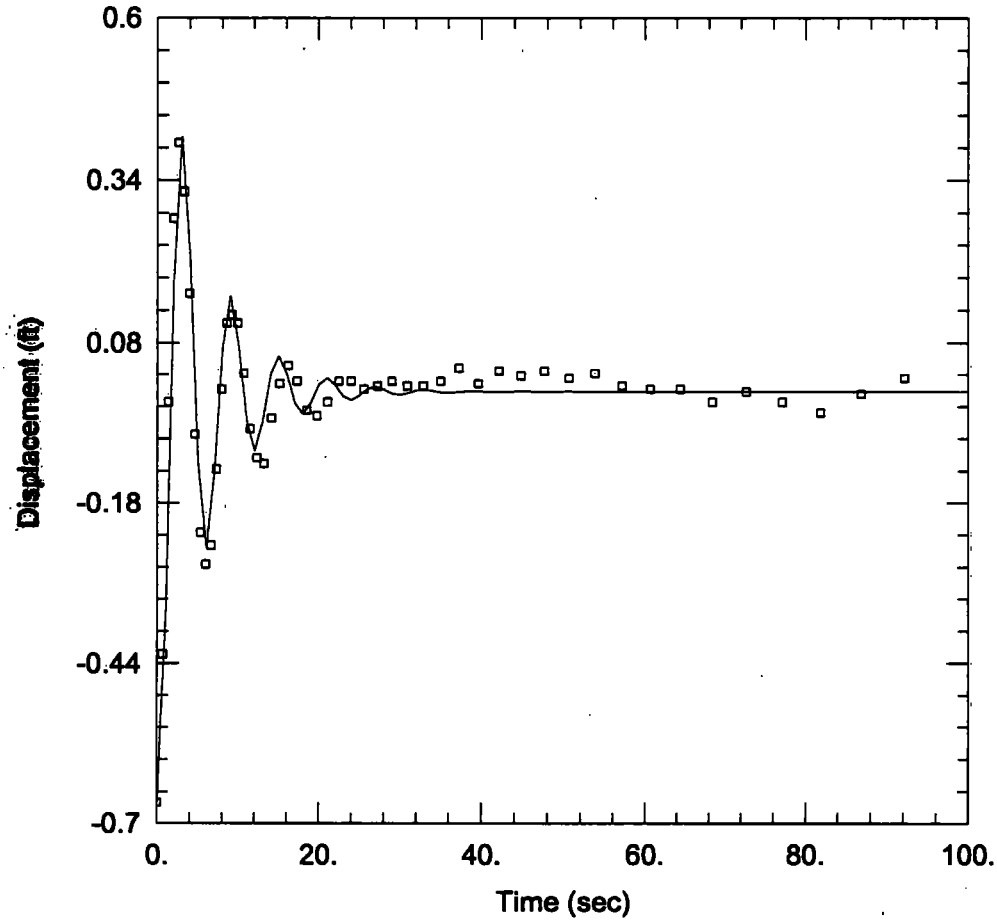
WELL DATA (MW-6M SO 1)

Initial Displacement: -0.619 ft
Total Well Penetration Depth: 40. ft
Casing Radius: 0.0833 ft
Static Water Column Height: 40. ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 264.4 ft/day Le = 28.11 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6M SO 2.aqt
Date: 07/10/06 Time: 10:41:38

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6M SO 2
Test Date: 4/13/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

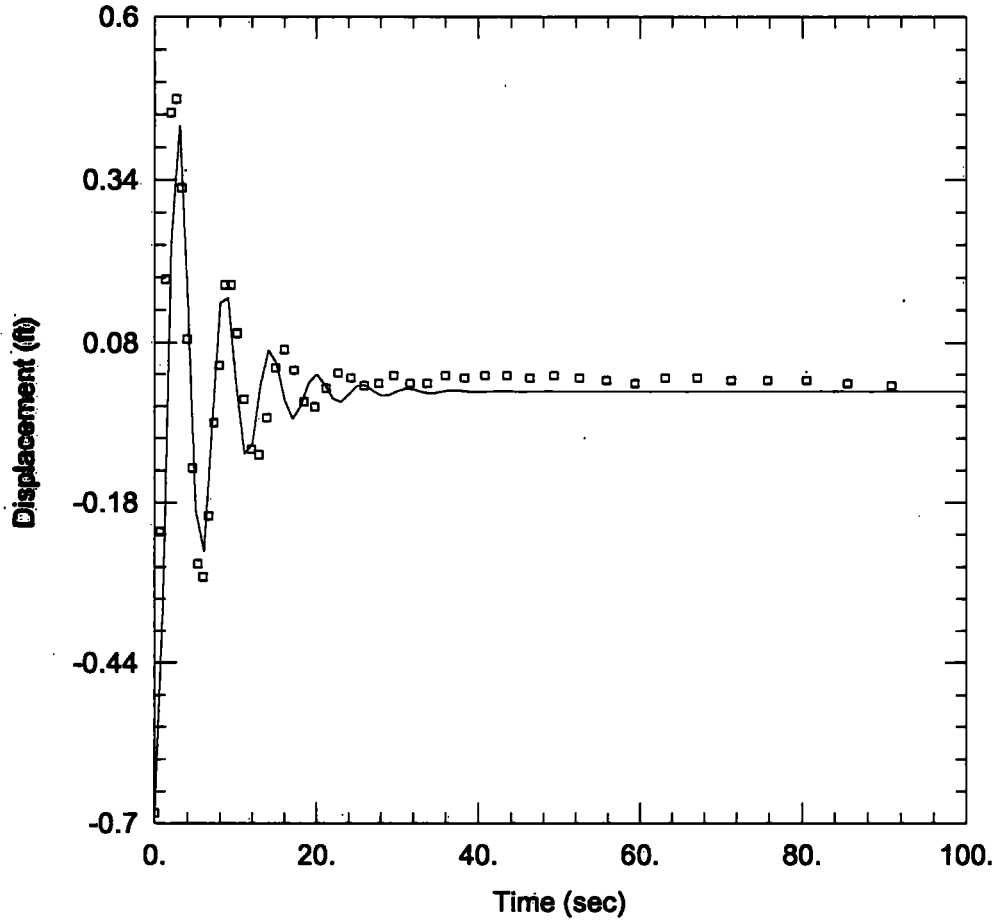
WELL DATA (MW-6M SO 2)

Initial Displacement: -0.666 ft
Total Well Penetration Depth: 39.92 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 39.92 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 265.4 ft/day Le = 28.42 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-6M SO 3.aqt
Date: 07/10/06 Time: 10:41:27

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-6M SO 3
Test Date: 4/13/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

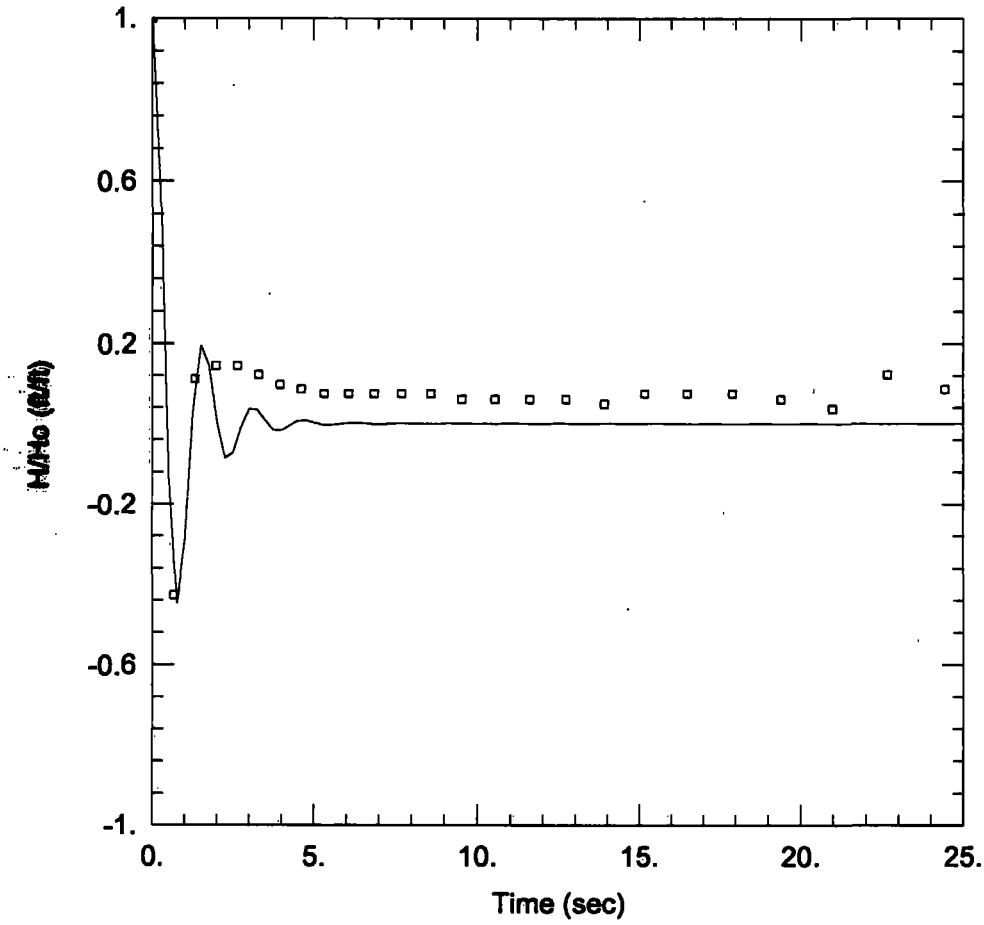
WELL DATA (MW-6M SO 3)

Initial Displacement: -0.683 ft
Total Well Penetration Depth: 39.92 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 39.92 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 298.5 ft/day Le = 25.78 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7S SI 2.aqt
Date: 07/10/06 Time: 10:53:23

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7S SI 2
Test Date: 4/8/2006

AQUIFER DATA

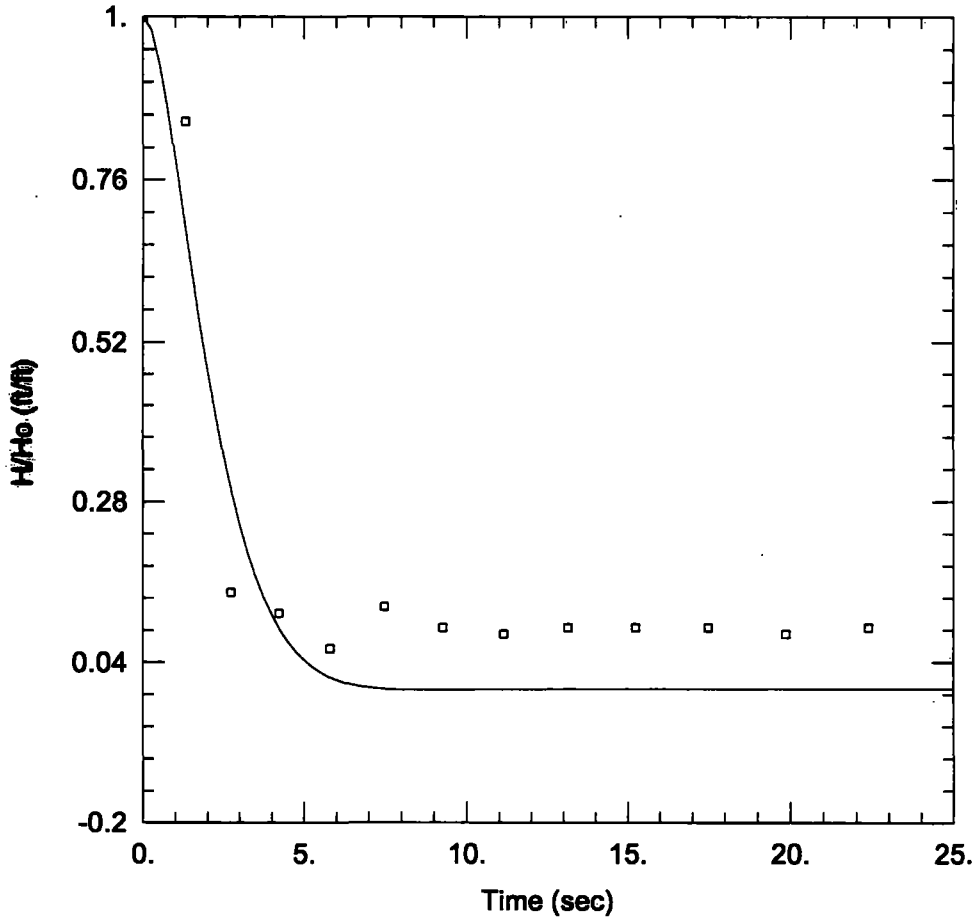
Saturated Thickness: 34.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7S SI 2)

Initial Displacement: 0.351 ft
Total Well Penetration Depth: 9.2 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 9.2 ft
Screen Length: 9.2 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 714.7 ft/day
Le = 1.847 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7S SI 3.aqt
Date: 07/17/06 Time: 16:53:56

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7S SI 3
Test Date: 4/8/2006

AQUIFER DATA

Saturated Thickness: 34.5 ft
Anisotropy Ratio (Kz/Kr): 1.

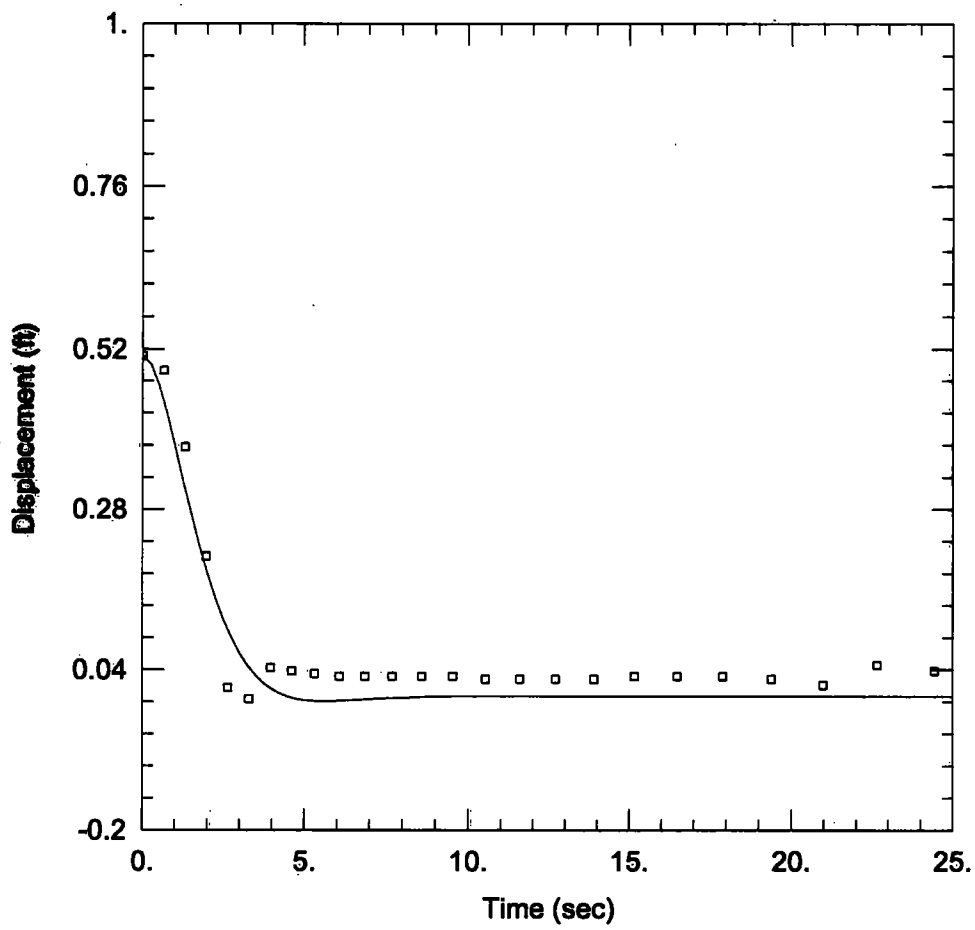
WELL DATA (MW-7S SI 3)

Initial Displacement: 0.415 ft
Total Well Penetration Depth: 9.2 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 9.2 ft
Screen Length: 9.2 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar

K = 38.73 ft/day
Le = 46.54 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7S SI 4.aqt
Date: 07/17/06 Time: 16:55:01

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7S SI 4
Test Date: 4/12/2006

AQUIFER DATA

Saturated Thickness: 34.5 ft
Anisotropy Ratio (Kz/Kr): 1.

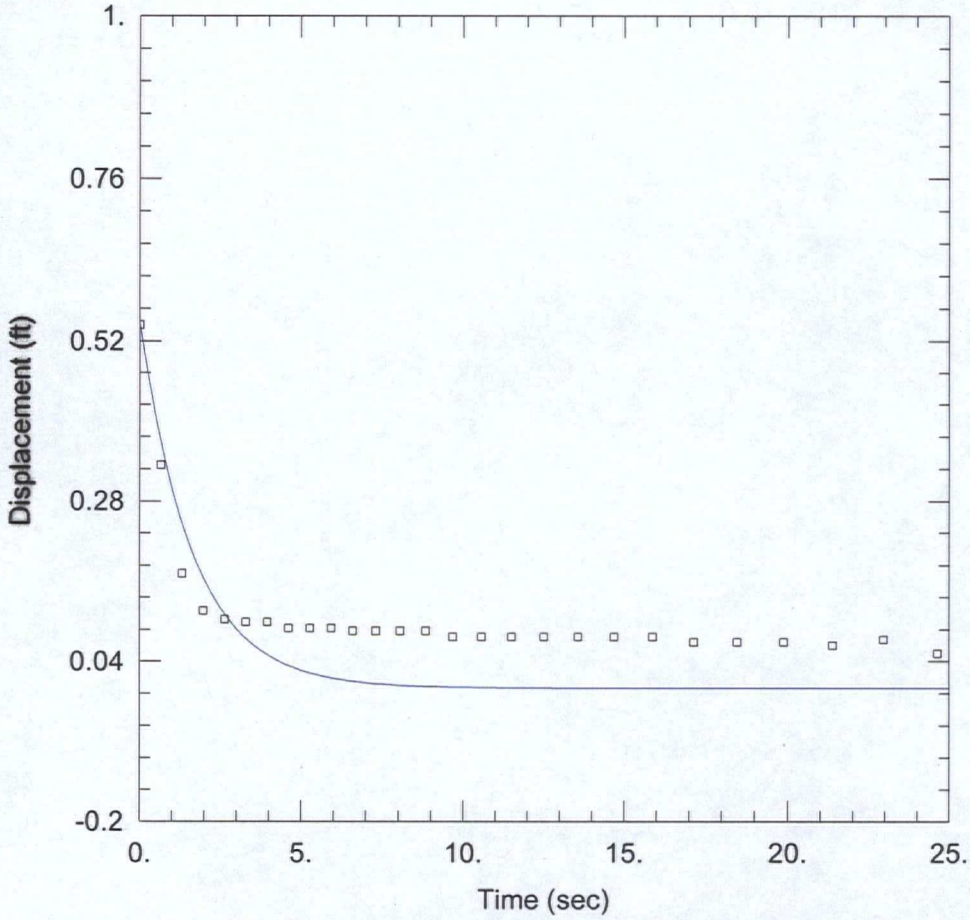
WELL DATA (MW-7S SI 4)

Initial Displacement: 0.51 ft
Total Well Penetration Depth: 9.14 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 9.14 ft
Screen Length: 9.14 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar

K = 49.67 ft/day
Le = 35.99 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7S SO 1.aqt
Date: 07/17/06 Time: 16:56:26

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7S SO 1
Test Date: 4/8/2006

AQUIFER DATA

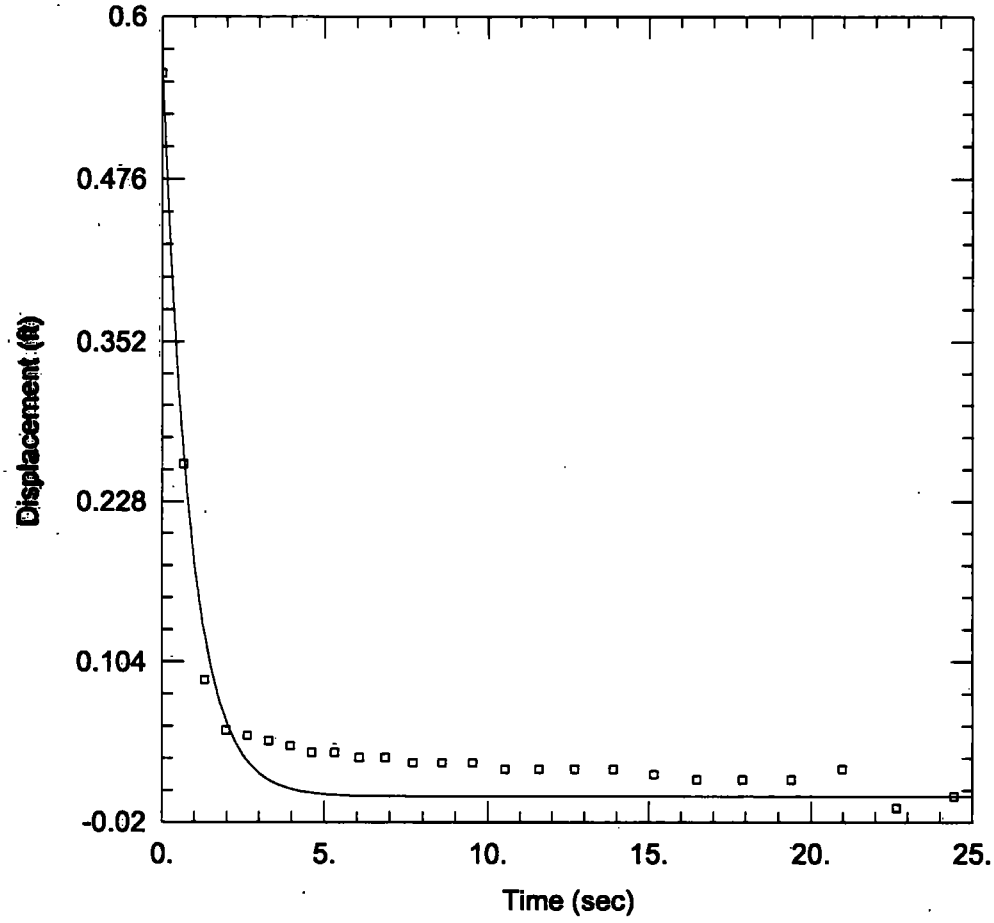
Saturated Thickness: 34.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7S SO 1)

Initial Displacement: 0.544 ft
Total Well Penetration Depth: 9.2 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 9.2 ft
Screen Length: 9.2 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 50.82 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7S SO 2.aqt
Date: 07/10/06 Time: 10:52:39

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7S SO 2
Test Date: 4/8/2006

AQUIFER DATA

Saturated Thickness: 34.5 ft
Anisotropy Ratio (Kz/Kr): 1.

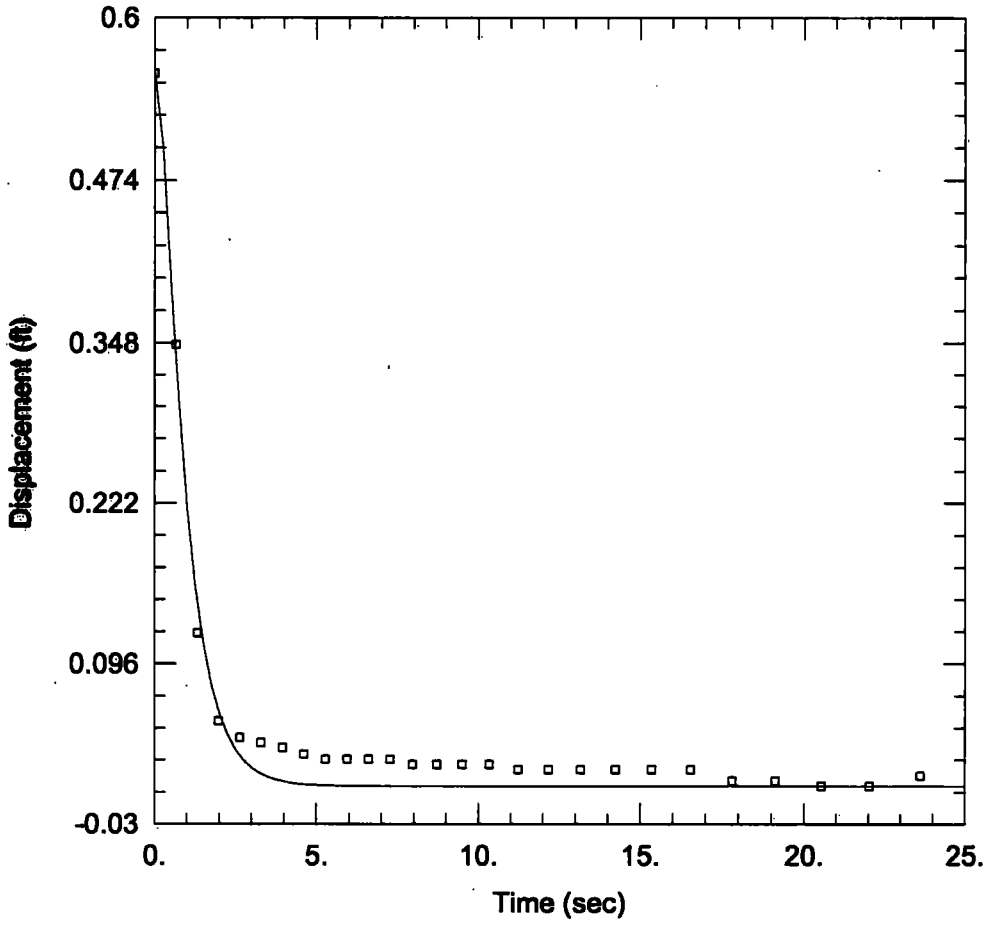
WELL DATA (MW-7S SO 2)

Initial Displacement: 0.557 ft
Total Well Penetration Depth: 9.2 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 9.2 ft
Screen Length: 9.2 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar

K = 96.24 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7S SO 3.aqt
Date: 07/10/06 Time: 10:52:28

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7S SO 3
Test Date: 4/8/2006

AQUIFER DATA

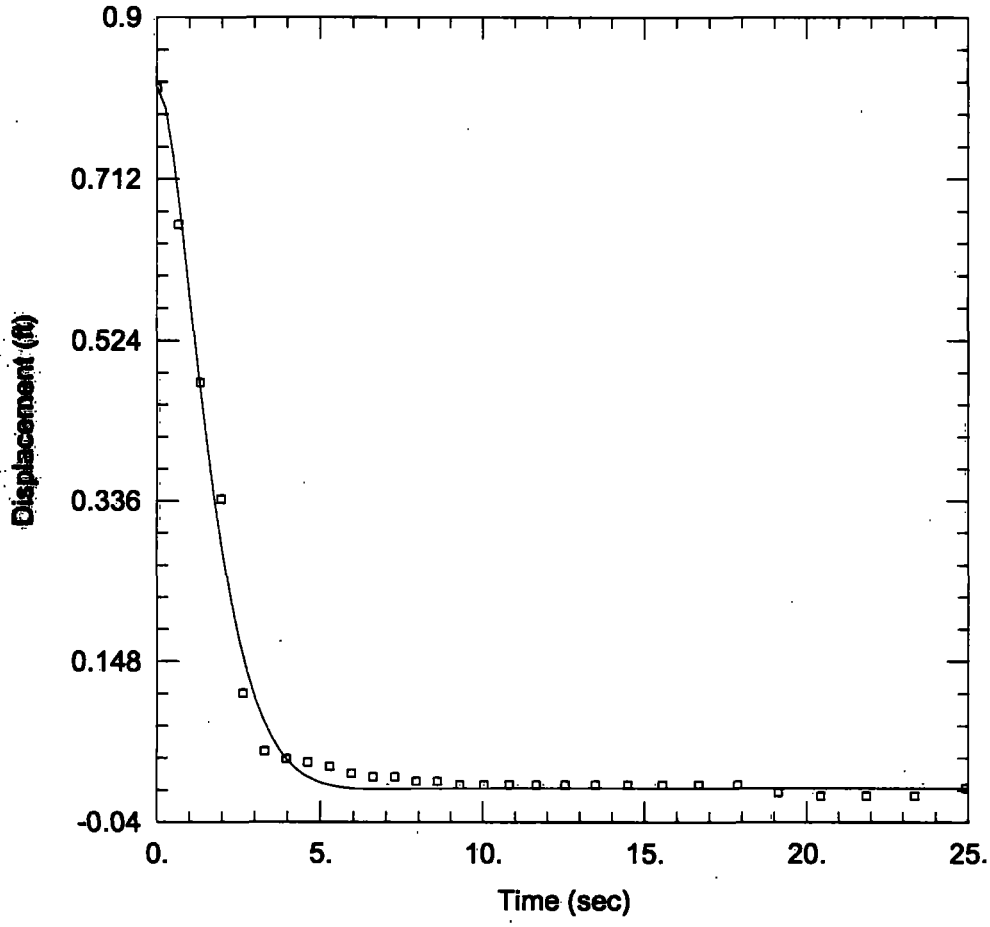
Saturated Thickness: 34.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7S SO 3)

Initial Displacement: 0.557 ft
Total Well Penetration Depth: 9.2 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 9.2 ft
Screen Length: 9.2 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 83.9 ft/day
Le = 6.486 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7S SO 4.aqt
Date: 07/10/06 Time: 10:52:17

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7S SO 4
Test Date: 4/12/2006

AQUIFER DATA

Saturated Thickness: 34.5 ft Anisotropy Ratio (Kz/Kr): 1.

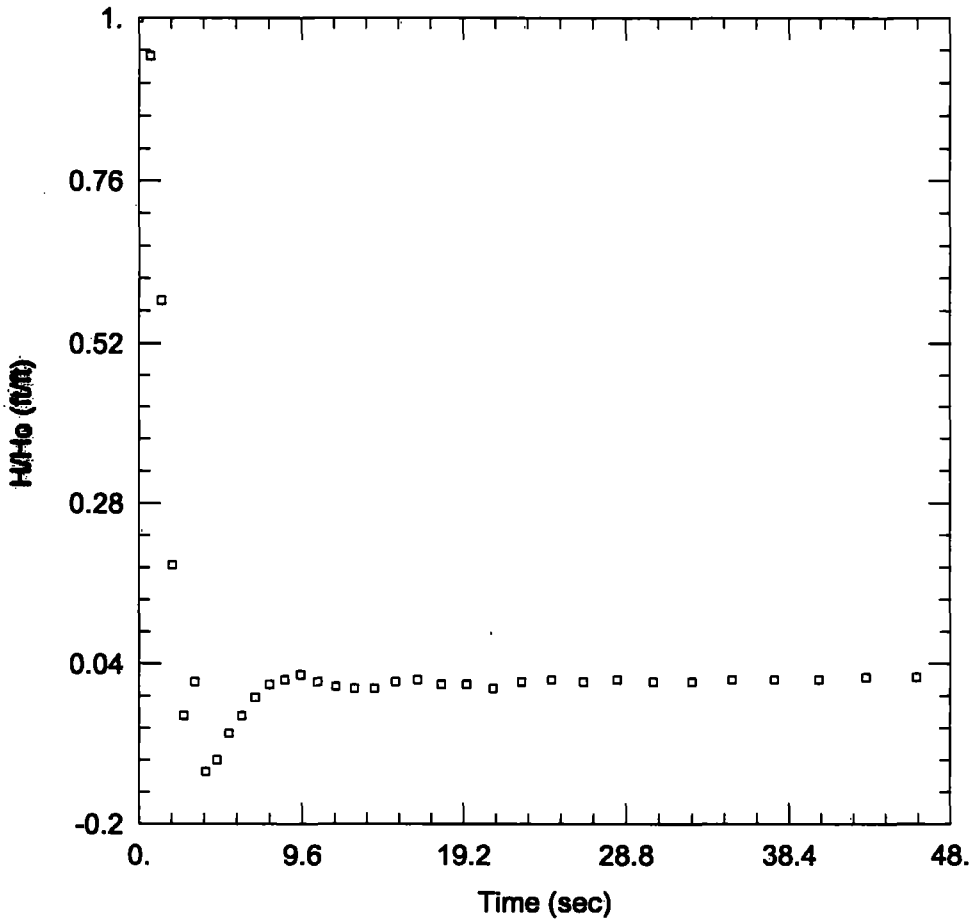
WELL DATA (MW-7S SO 4)

Initial Displacement: 0.818 ft
Total Well Penetration Depth: 9.14 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 9.14 ft
Screen Length: 9.14 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 49.46 ft/day Le = 29.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7M SI 1.aqt
Date: 07/17/06 Time: 14:51:05

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7M SI 1
Test Date: 4/8/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

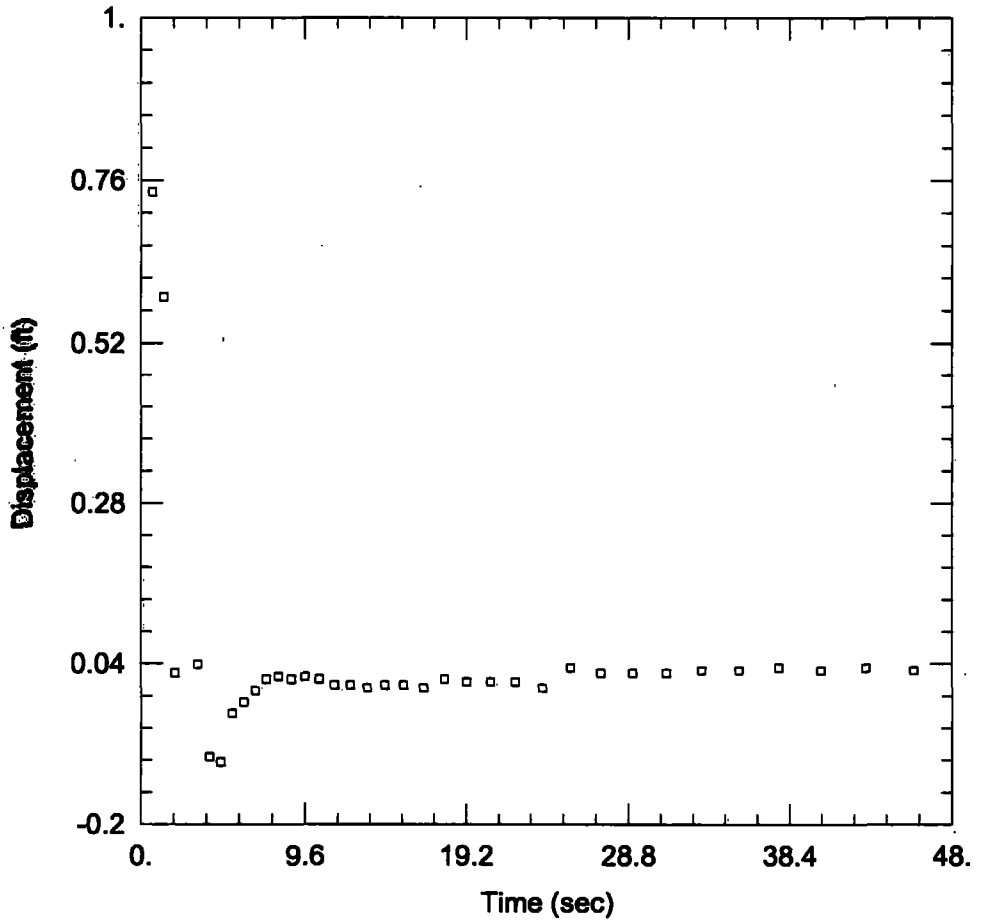
WELL DATA (MW-7M SI 1)

Initial Displacement: 1.278 ft
Total Well Penetration Depth: 47.27 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 47.27 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 62.98 ft/day Le = 35.76 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7M SI 2.aqt
Date: 07/17/06 Time: 17:02:39

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7M SI 2
Test Date: 4/8/2006

AQUIFER DATA

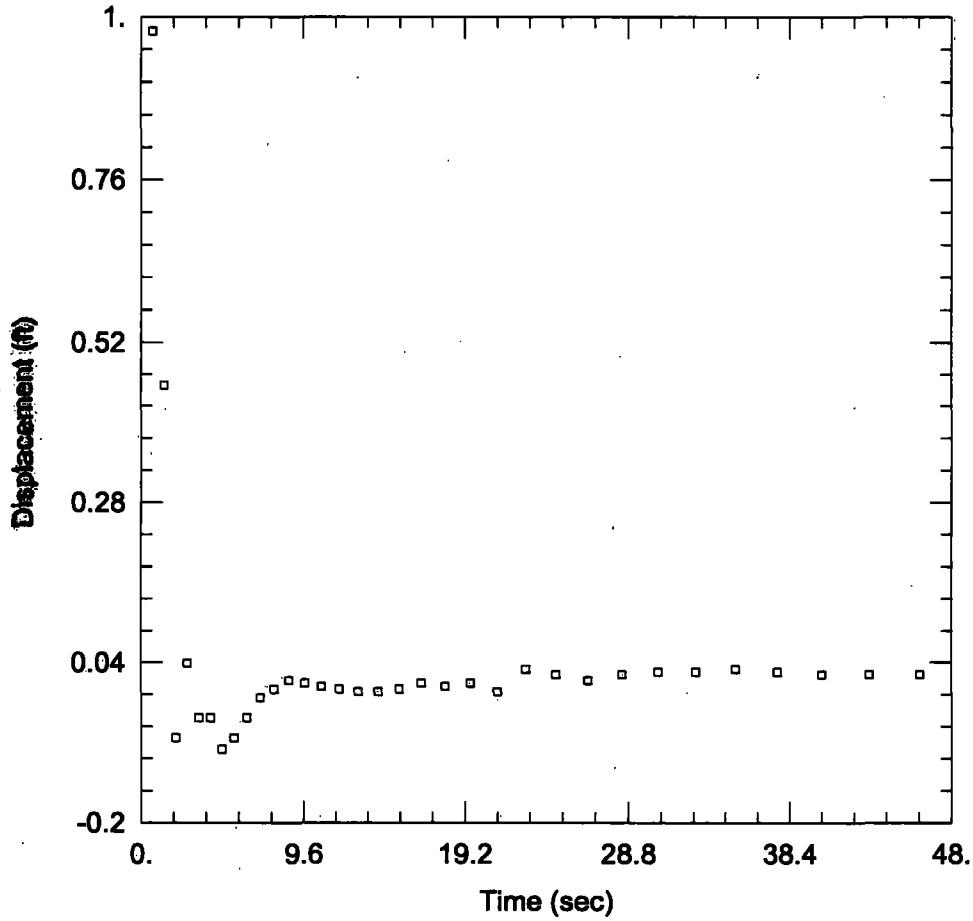
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7M SI 2)

Initial Displacement: 1.044 ft
Total Well Penetration Depth: 47.27 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 47.27 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 83.37 ft/day
Le = 25.71 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7M SI 3.aqt
Date: 07/17/06 Time: 17:03:40

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7M SI 3
Test Date: 4/8/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

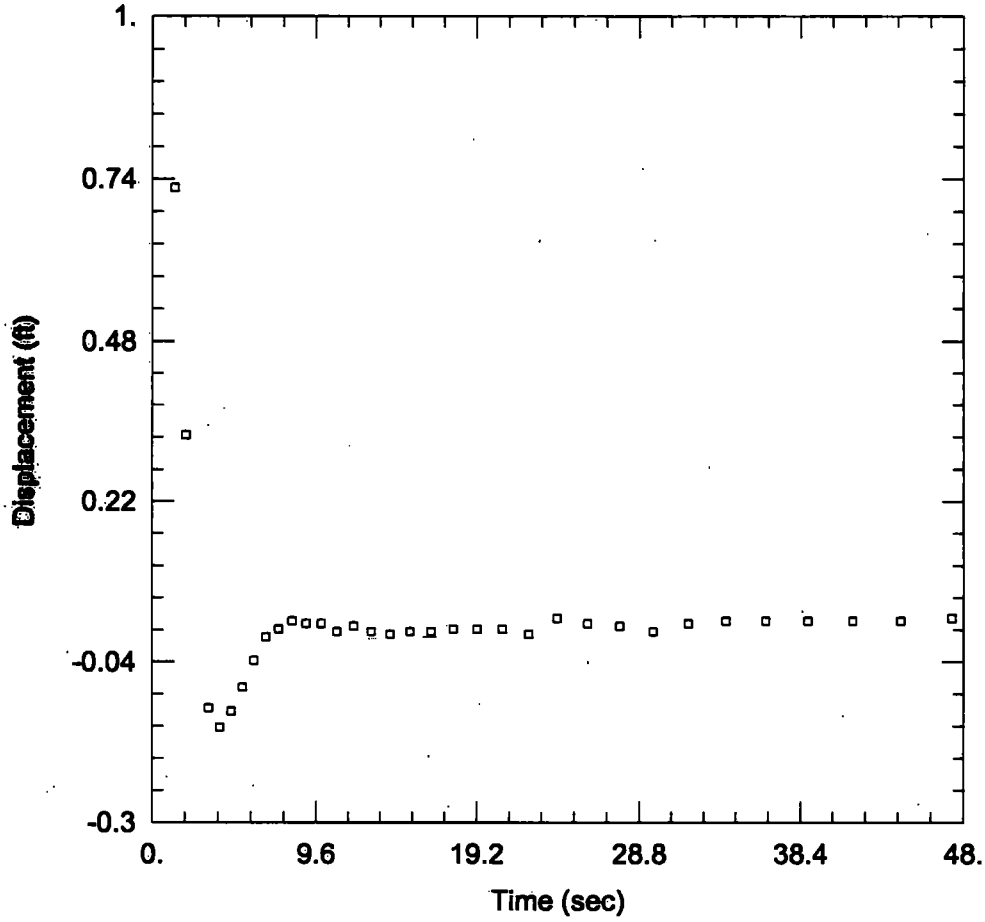
WELL DATA (MW-7M SI 3)

Initial Displacement: 1.164 ft
Total Well Penetration Depth: 47.27 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 47.27 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 72.79 ft/day Le = 20.65 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7M SI 4.aqt
Date: 07/17/06 Time: 17:04:27

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7M SI 4
Test Date: 4/12/2006

AQUIFER DATA

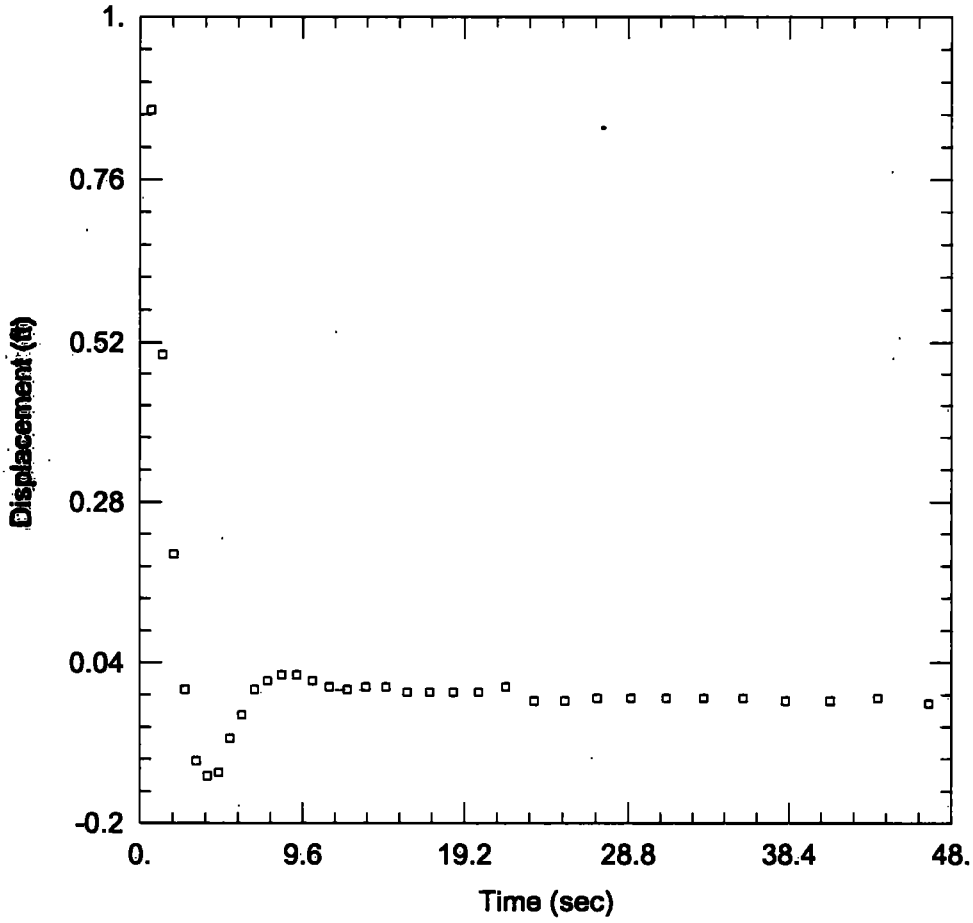
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7M SI 4)

Initial Displacement: 1.199 ft
Total Well Penetration Depth: 47.22 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 47.22 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 76.76 ft/day
Le = 34.68 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7M SO 1.aqt
Date: 07/17/06 Time: 17:05:21

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7M SO 1
Test Date: 4/8/2006

AQUIFER DATA

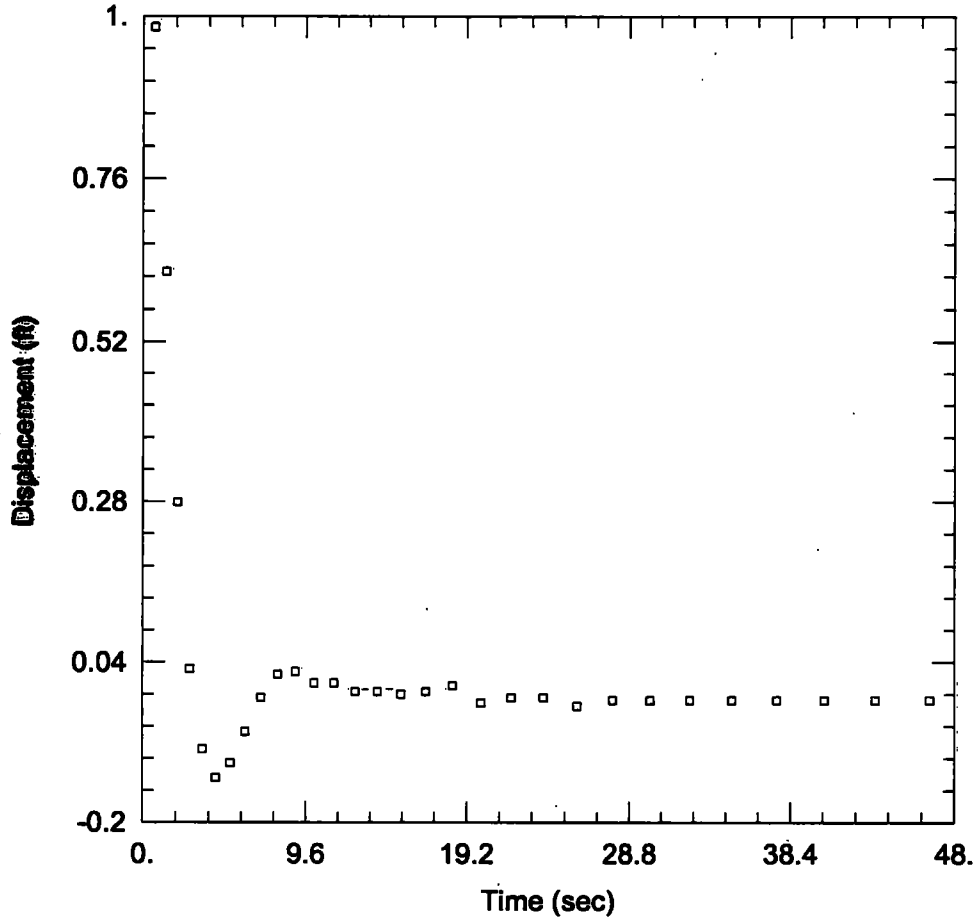
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7M SO 1)

Initial Displacement: 1.189 ft
Total Well Penetration Depth: 47.27 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 47.27 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 69.07 ft/day
Le = 26.71 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7M SO 2.aqt
Date: 07/17/06 Time: 17:05:51

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7M SO 2
Test Date: 4/8/2006

AQUIFER DATA

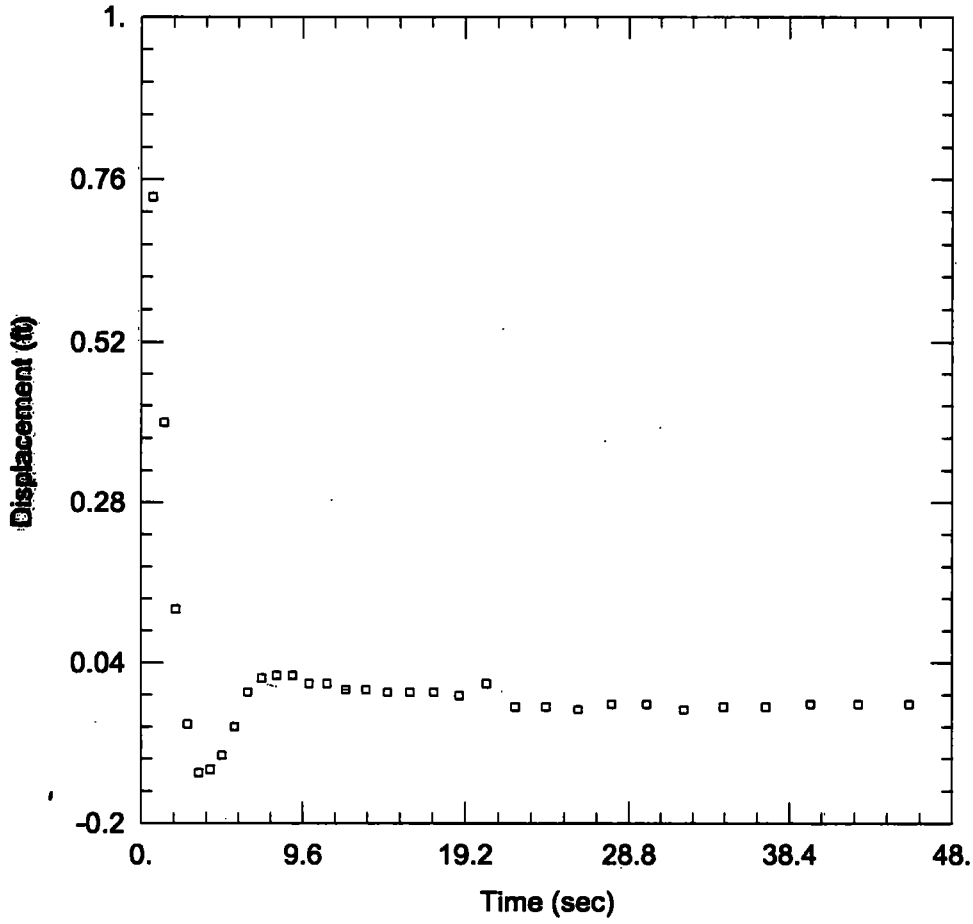
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7M SO 2)

Initial Displacement: 1.25 ft
Total Well Penetration Depth: 47.27 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 47.27 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 62.41 ft/day
Le = 33.32 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7M SO 3.aqt
Date: 07/17/06 Time: 17:06:36

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7M SO 3
Test Date: 4/8/2006

AQUIFER DATA

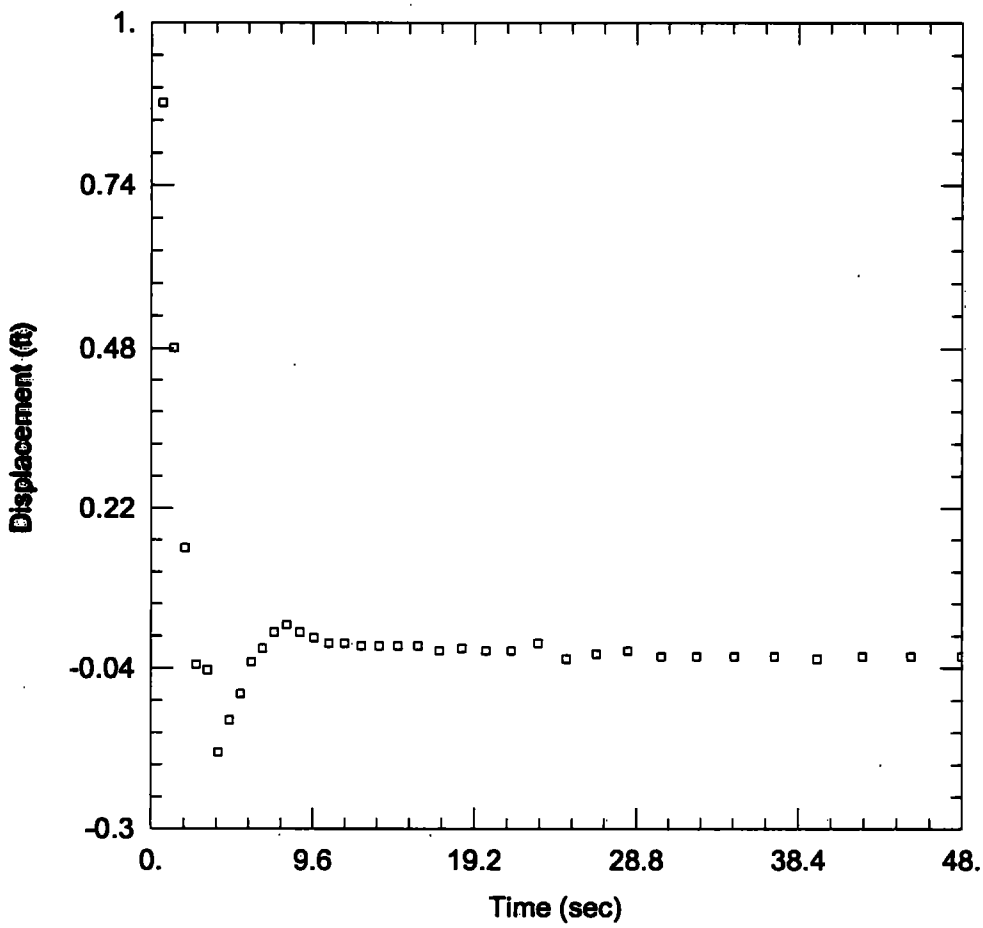
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7M SO 3)

Initial Displacement: 1.086 ft
Total Well Penetration Depth: 47.27 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 47.27 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 74.3 ft/day
Le = 23.66 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-7M SO 4.aqt
Date: 07/17/06 Time: 17:07:22

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-7M SO 4
Test Date: 4/12/2006

AQUIFER DATA

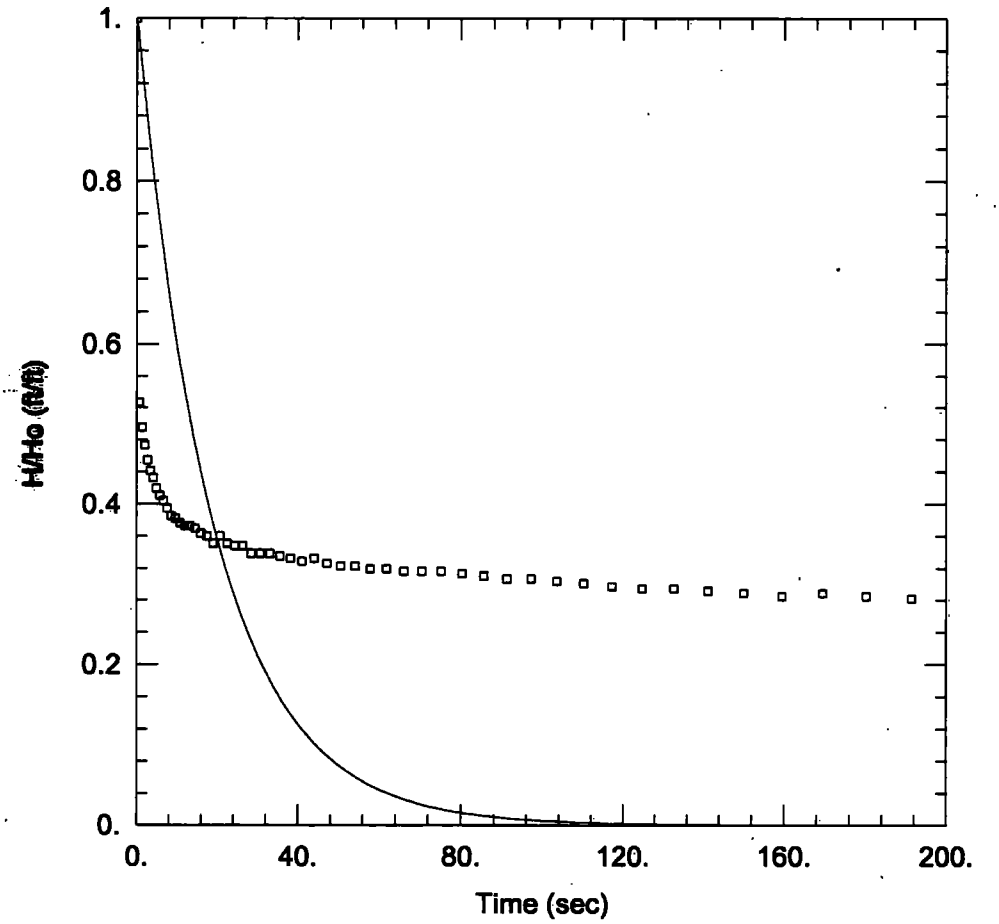
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-7M SO 4)

Initial Displacement: 1.22 ft
Total Well Penetration Depth: 47.22 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 47.22 ft
Screen Length: 10. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 71.38 ft/day
Le = 23.83 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9S SI 1.aqt
Date: 07/10/06 Time: 10:57:30

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9S SI 1
Test Date: 4/8/2006

AQUIFER DATA

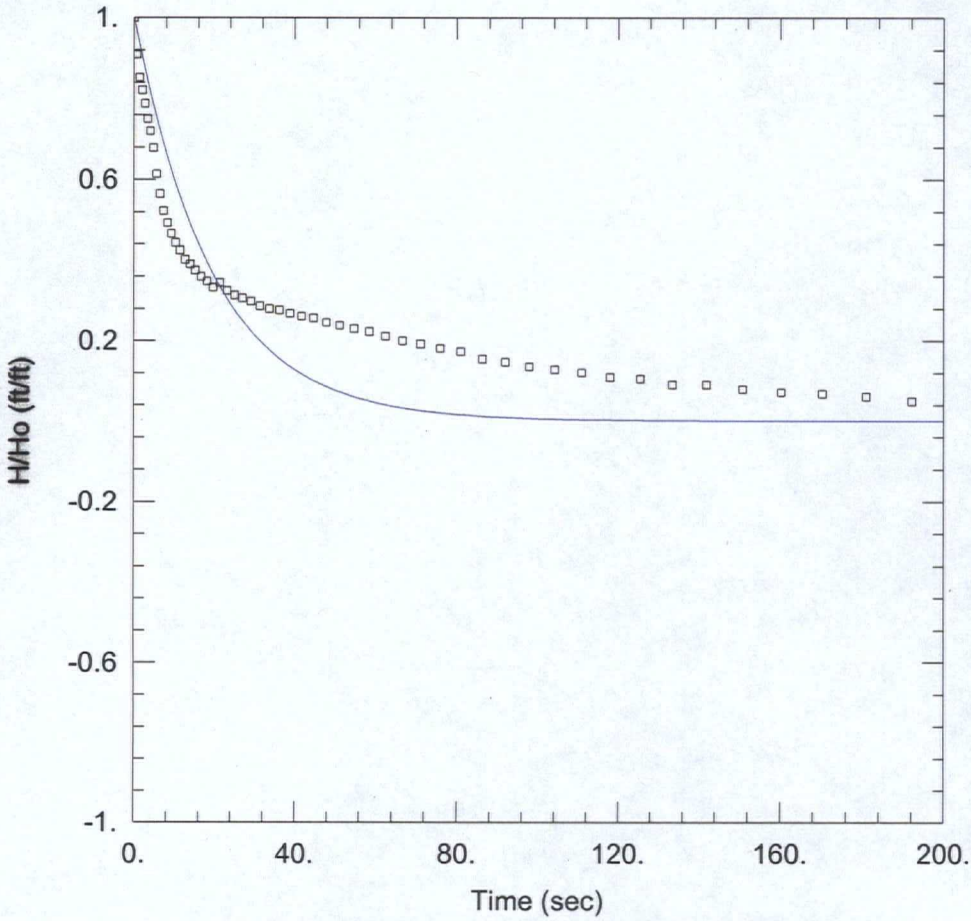
Saturated Thickness: 8. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9S SI 1)

Initial Displacement: 1.366 ft
Total Well Penetration Depth: 8.4 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.4 ft
Screen Length: 8.4 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 5.466 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9S SI 2.aqt
Date: 07/10/06 Time: 10:57:18

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9S SI 2
Test Date: 4/11/2006

AQUIFER DATA

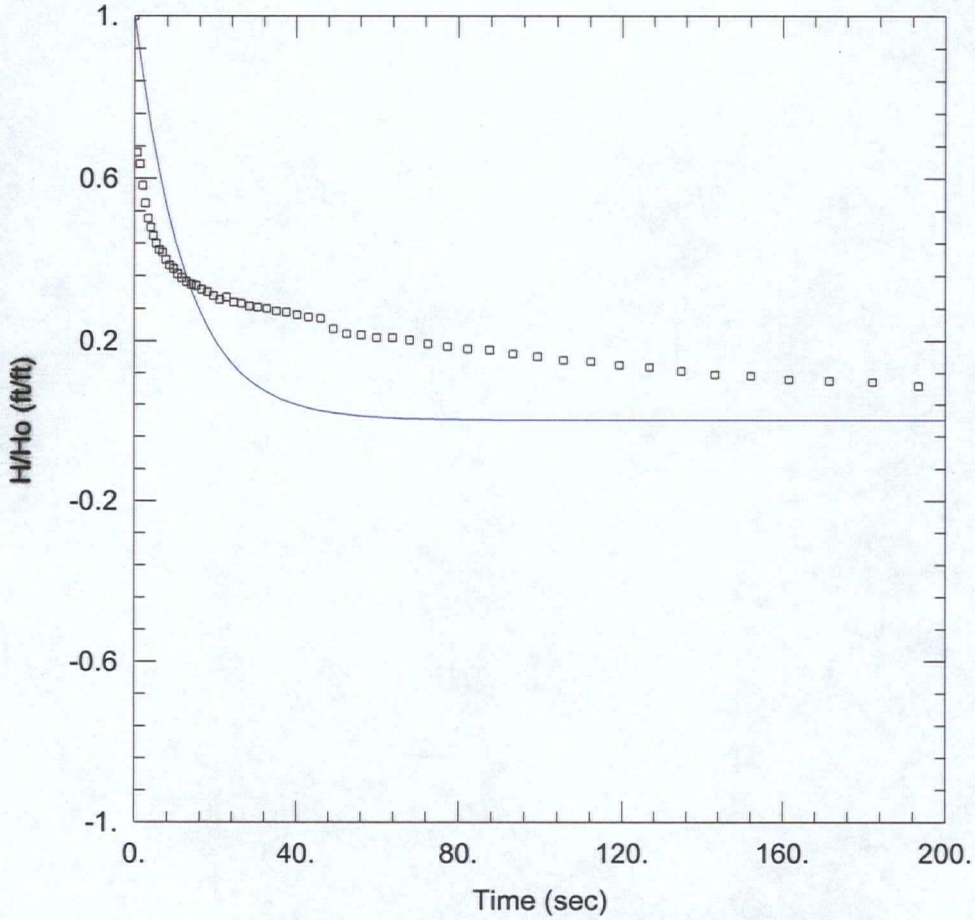
Saturated Thickness: 8. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9S SI 2)

Initial Displacement: 1.131 ft
Total Well Penetration Depth: 8.3 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.3 ft
Screen Length: 8.3 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 5.448 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9S SI 3.aqt
Date: 07/10/06 Time: 10:57:06

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9S SI 3
Test Date: 4/11/2006

AQUIFER DATA

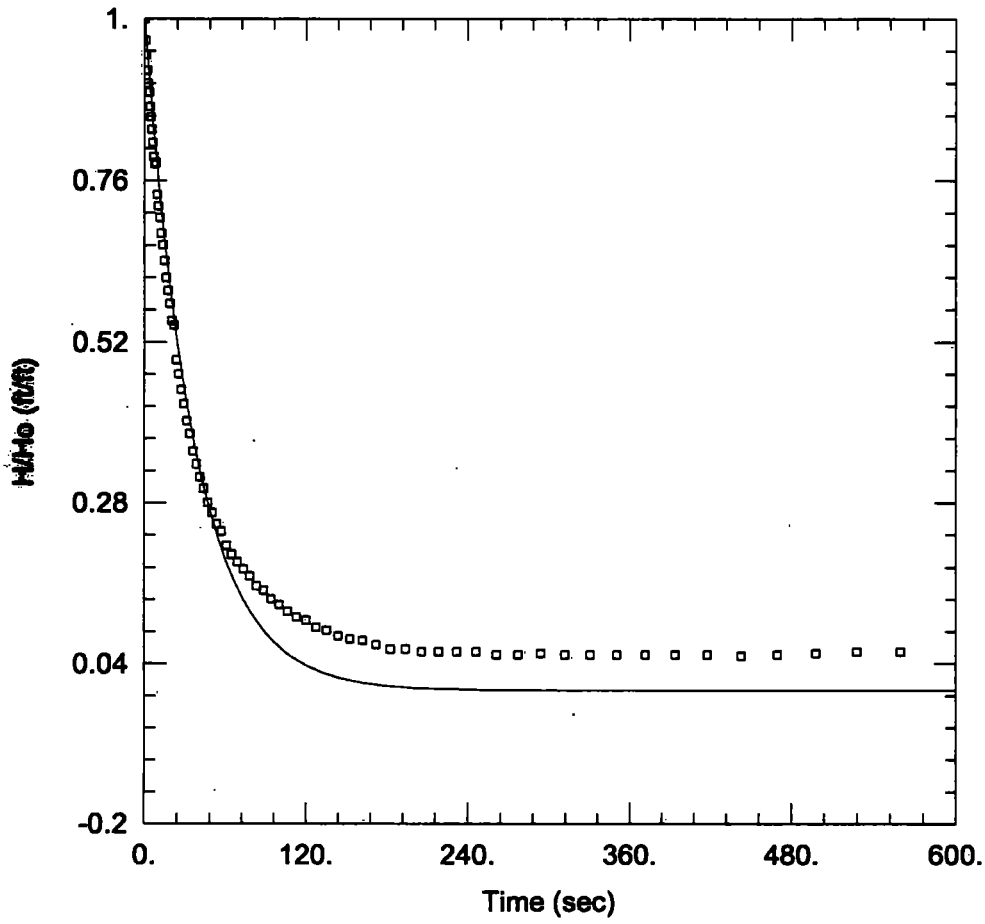
Saturated Thickness: 8. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9S SI 3)

Initial Displacement: 1.375 ft
Total Well Penetration Depth: 8.3 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.3 ft
Screen Length: 8.3 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 8.6 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9S SO 1.aqt
Date: 07/17/06 Time: 17:08:24

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9S SO 1
Test Date: 4/8/2006

AQUIFER DATA

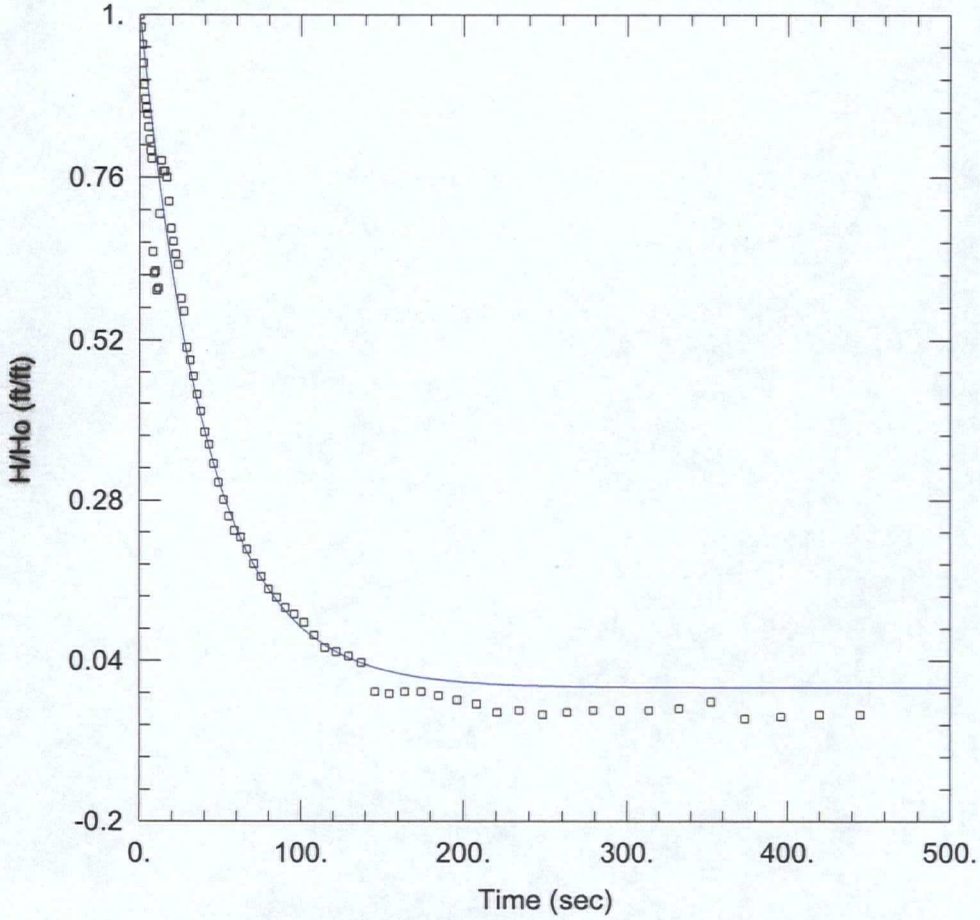
Saturated Thickness: 8. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9S SO 1)

Initial Displacement: 2.003 ft
Total Well Penetration Depth: 8.4 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.4 ft
Screen Length: 8.4 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 2.882 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9S SO 2.aqt
Date: 07/17/06 Time: 17:09:11

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9S SO 2
Test Date: 4/11/2006

AQUIFER DATA

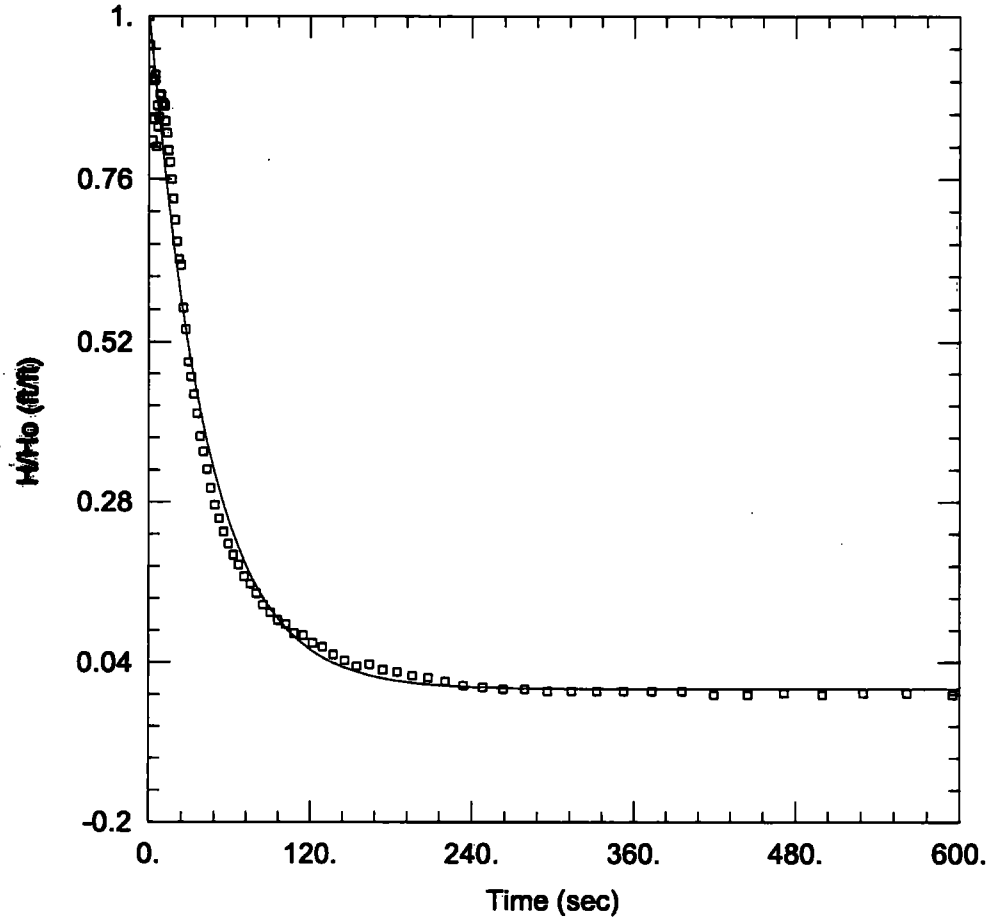
Saturated Thickness: 8. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9S SO 2)

Initial Displacement: 1.37 ft
Total Well Penetration Depth: 8.3 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.3 ft
Screen Length: 8.3 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 2.559 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9S SO 3.aqt
Date: 07/17/06 Time: 17:10:03

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9S SO 3
Test Date: 4/11/2006

AQUIFER DATA

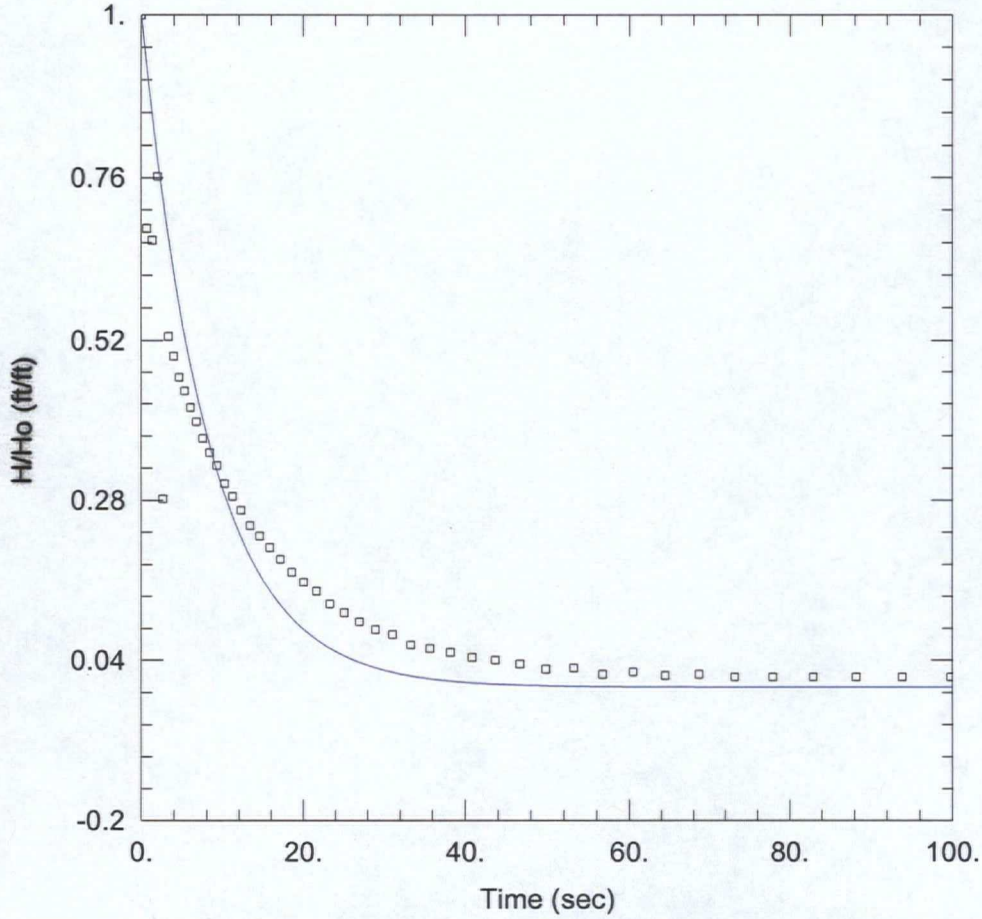
Saturated Thickness: 8. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9S SO 3)

Initial Displacement: 1.494 ft
Total Well Penetration Depth: 8.3 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 8.3 ft
Screen Length: 8.3 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 2.474 ft/day
Le = 1000. ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9M SI 1.aqt
Date: 07/17/06 Time: 17:10:49

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9M SI 1
Test Date: 4/8/2006

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

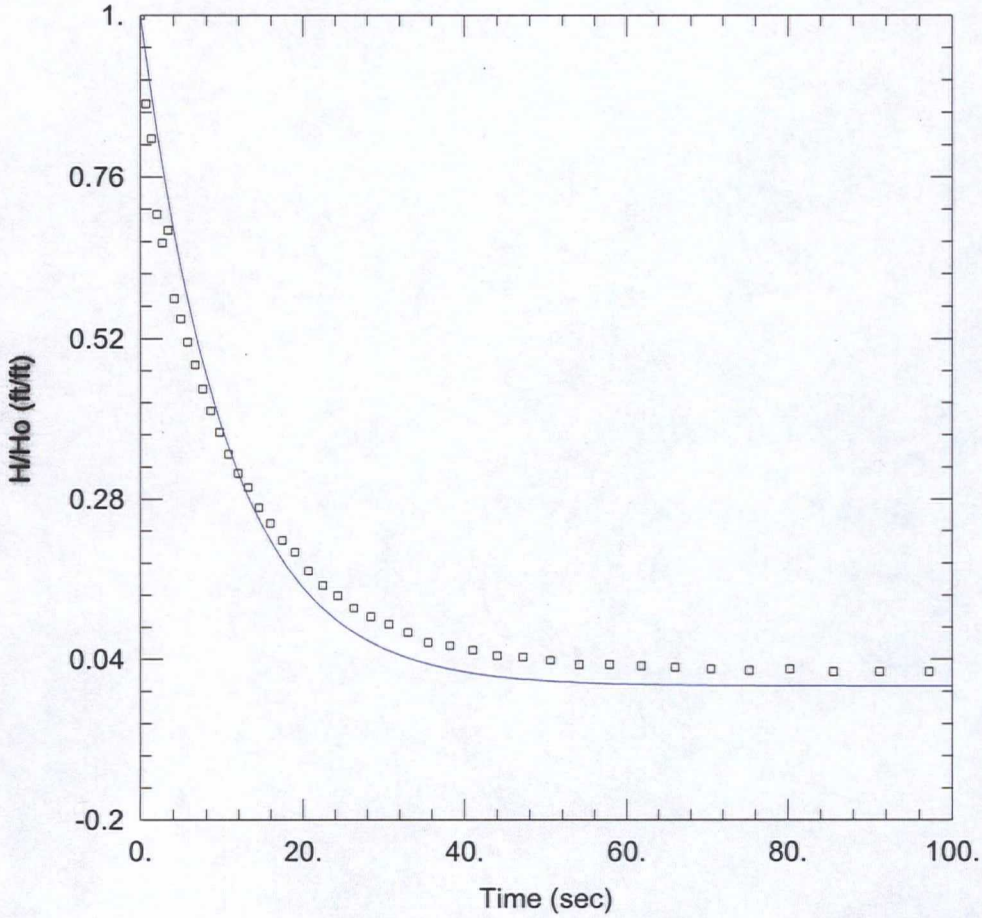
WELL DATA (MW-9M SI 1)

Initial Displacement: 2.236 ft
Total Well Penetration Depth: 25.84 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 25.84 ft
Screen Length: 5. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar

K = 13.21 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9M SI 2.aqt
Date: 07/17/06 Time: 17:11:31

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9M SI 2
Test Date: 4/11/2006

AQUIFER DATA

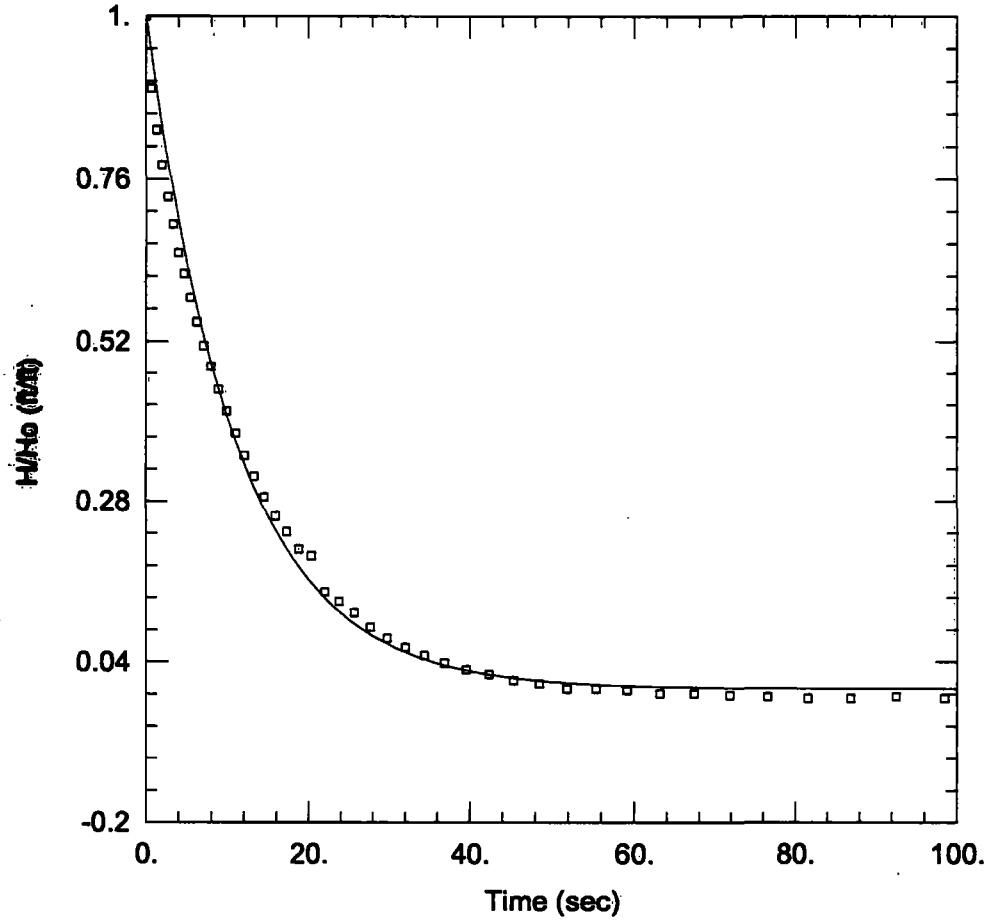
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9M SI 2)

Initial Displacement: 1.993 ft
Total Well Penetration Depth: 25.46 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 25.46 ft
Screen Length: 5. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 10.34 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9M SO 1.aqt
Date: 07/17/06 Time: 17:12:24

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9M SO 1
Test Date: 4/8/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

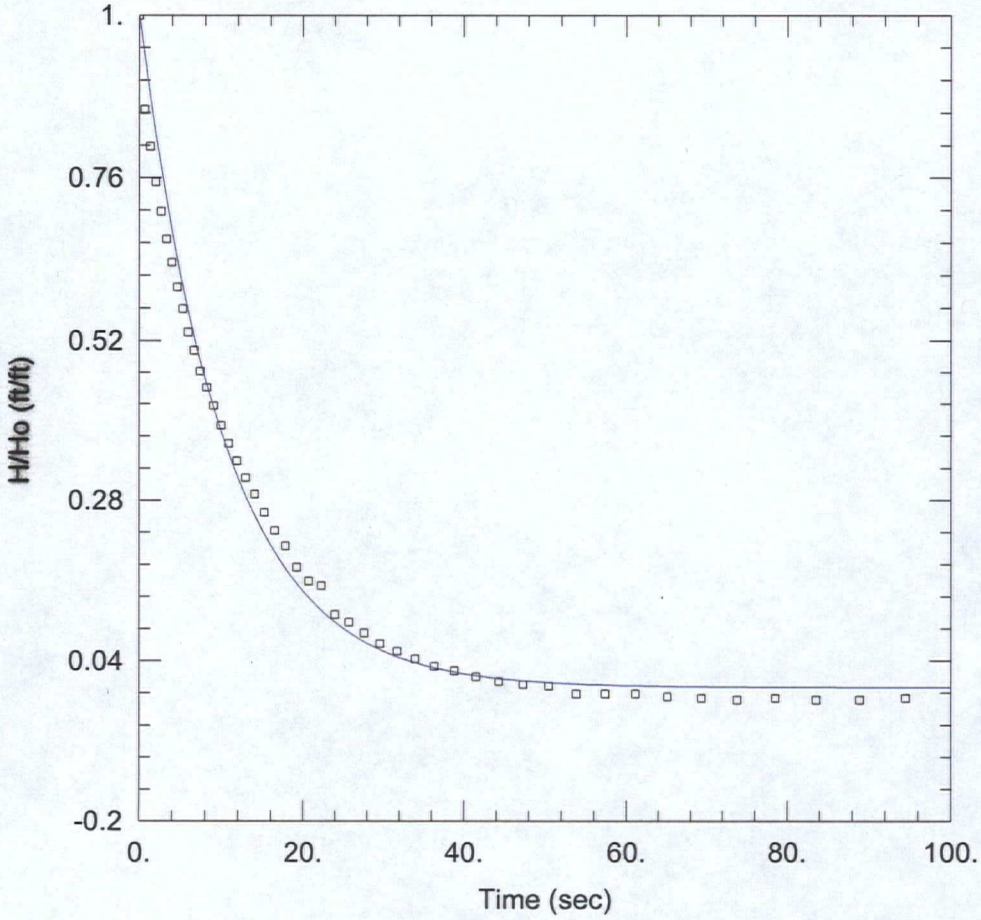
WELL DATA (MW-9M SO 1)

Initial Displacement: -1.814 ft
Total Well Penetration Depth: 25.84 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 25.84 ft
Screen Length: 5. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 9.826 ft/day Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-9M SO 2.aqt
Date: 07/17/06 Time: 17:13:07

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-9M SO 2
Test Date: 4/11/2006

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

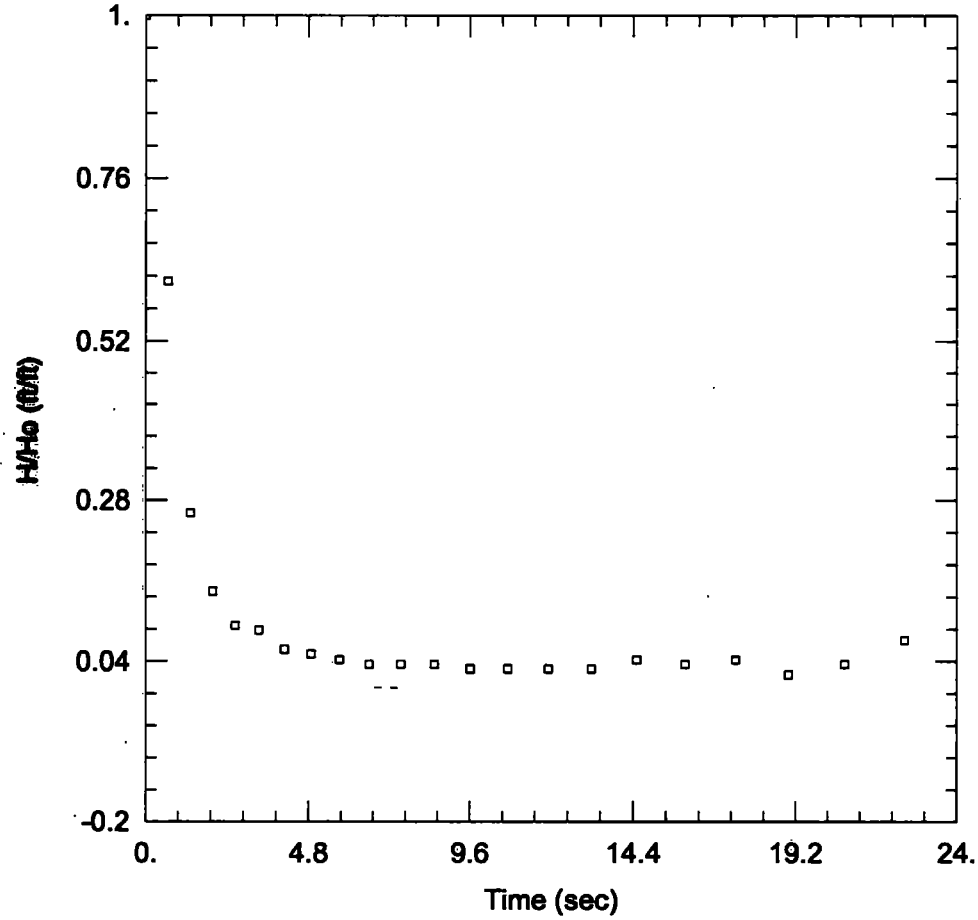
WELL DATA (MW-9M SO 2)

Initial Displacement: -1.885 ft
Total Well Penetration Depth: 25.46 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 25.46 ft
Screen Length: 5. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar

K = 10.44 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-10S SI.aqt
Date: 07/17/06 Time: 14:52:18

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-10S SI
Test Date: 4/13/2006

AQUIFER DATA

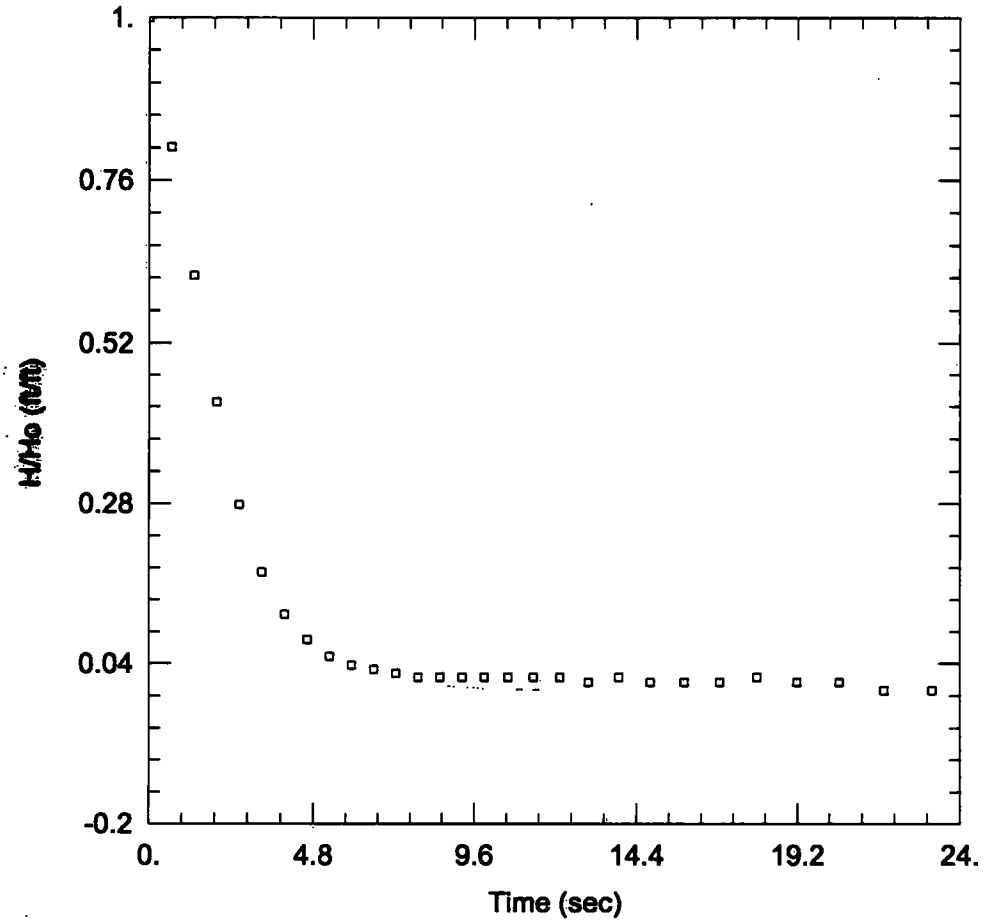
Saturated Thickness: 3.4 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-10S SI)

Initial Displacement: 0.59 ft
Total Well Penetration Depth: 3.37 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 3.37 ft
Screen Length: 3.37 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 173.9 ft/day
Le = 3.695 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-10S SO.aqt
Date: 07/17/06 Time: 14:52:45

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-10S SO
Test Date: 4/13/2006

AQUIFER DATA

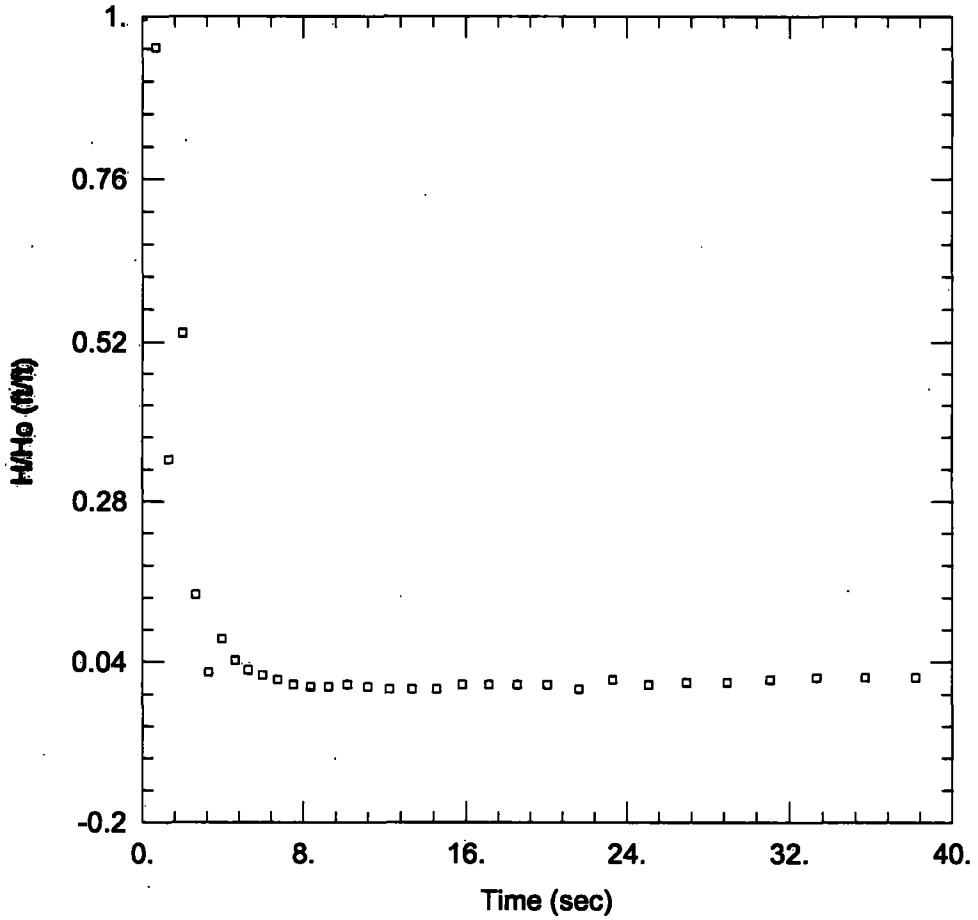
Saturated Thickness: 3.4 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-10S SO)

Initial Displacement: 0.676 ft
Total Well Penetration Depth: 3.37 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 3.37 ft
Screen Length: 3.37 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 92.68 ft/day
Le = 24.97 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-10M SI 1.aqt
Date: 07/17/06 Time: 14:53:16

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-10M SI 1
Test Date: 4/8/2006

AQUIFER DATA

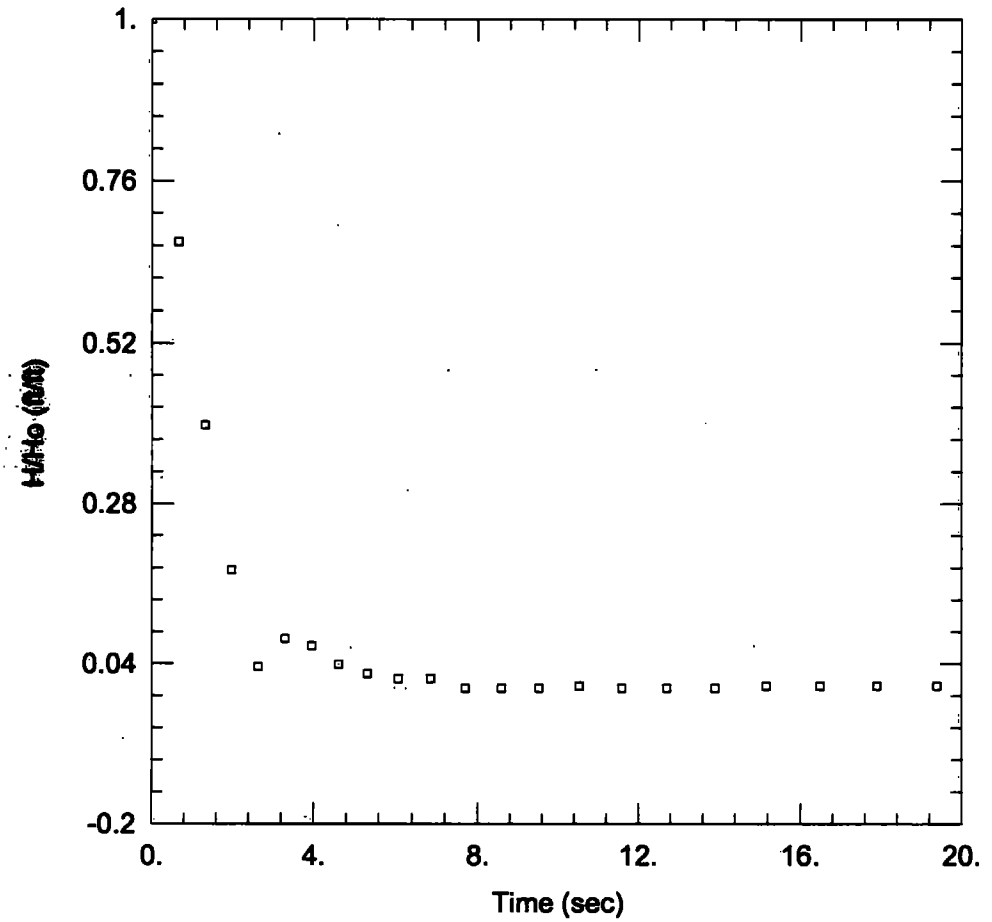
Saturated Thickness: 19. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-10M SI 1)

Initial Displacement: 1.215 ft
Total Well Penetration Depth: 18.8 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 18.8 ft
Screen Length: 6. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 70.07 ft/day
Le = 24.72 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-10M SI 2.aqt
Date: 07/17/06 Time: 14:53:40

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-10M SI 1
Test Date: 4/8/2006

AQUIFER DATA

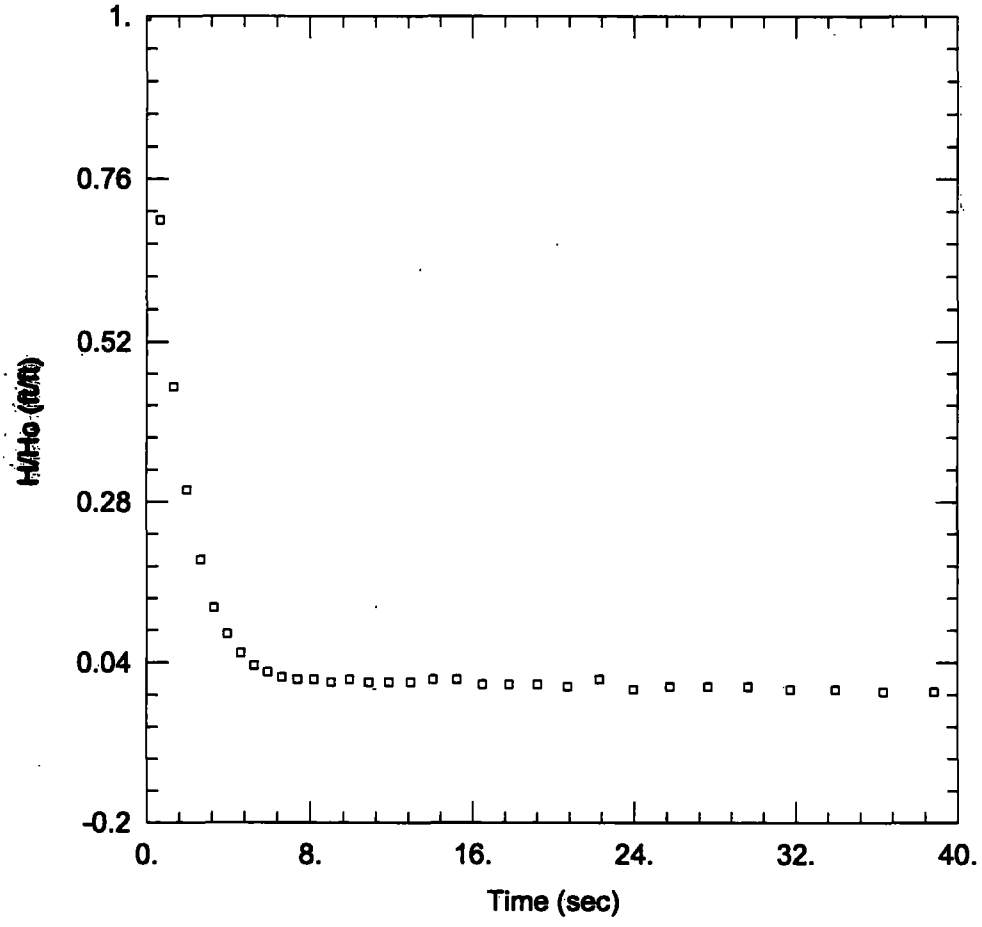
Saturated Thickness: 19. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-10M SI 2)

Initial Displacement: 1.211 ft
Total Well Penetration Depth: 18.7 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 18.7 ft
Screen Length: 6. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 91.95 ft/day
Le = 8.893 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-10M SO 1.aqt
Date: 07/18/06 Time: 09:39:36

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-10M SO 1
Test Date: 4/8/2006

AQUIFER DATA

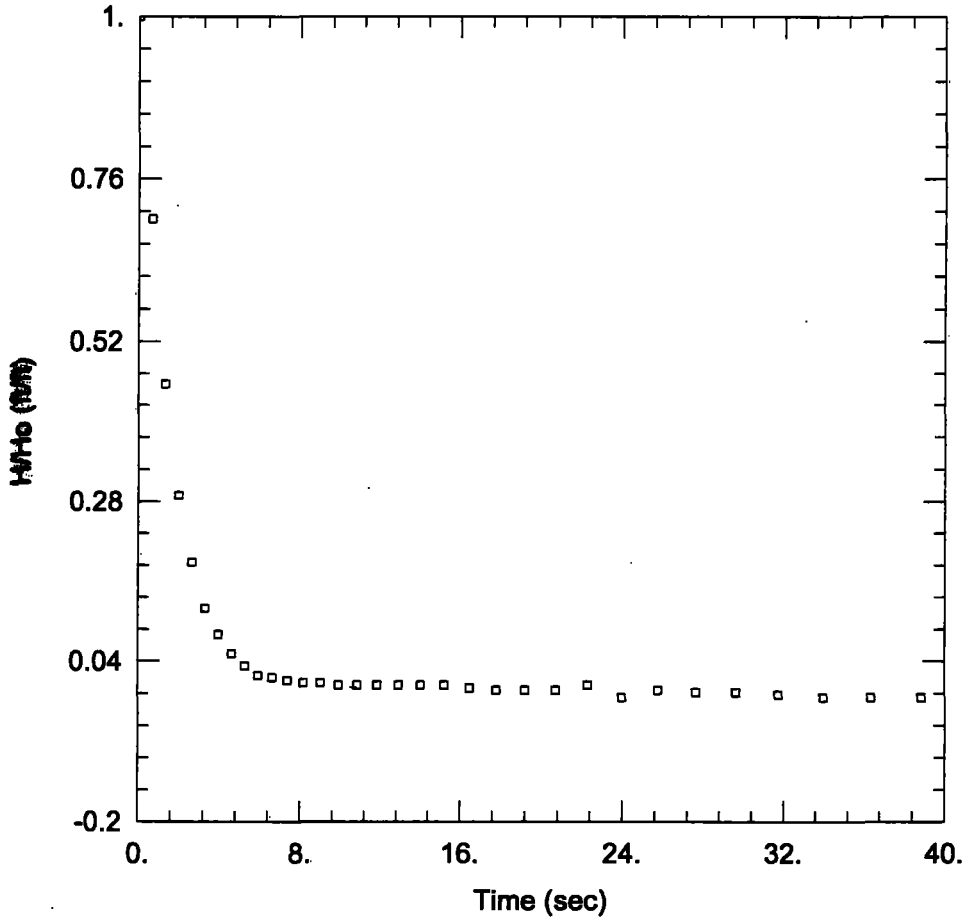
Saturated Thickness: 19. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-10M SO 1)

Initial Displacement: 1.198 ft
Total Well Penetration Depth: 18.8 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 18.8 ft
Screen Length: 6. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 73.07 ft/day
Le = 4.926 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-10M SO 2.aqt
Date: 07/18/06 Time: 09:39:55

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-10M SO 2
Test Date: 4/11/2006

AQUIFER DATA

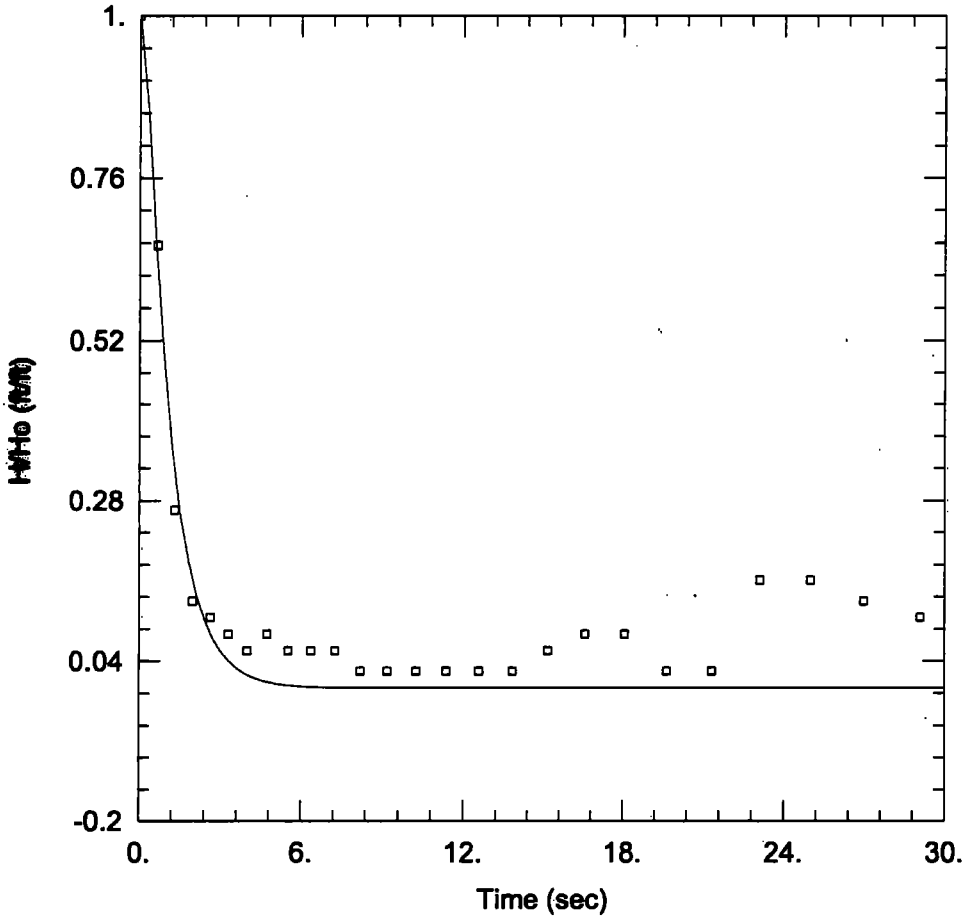
Saturated Thickness: 19. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-10M SI 2)

Initial Displacement: 1.19 ft
Total Well Penetration Depth: 18.7 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 18.7 ft
Screen Length: 6. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 72.38 ft/day
Le = 5.907 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-11S SI.aqt
Date: 07/17/06 Time: 14:54:21

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-11S SI
Test Date: 4/13/2006

AQUIFER DATA

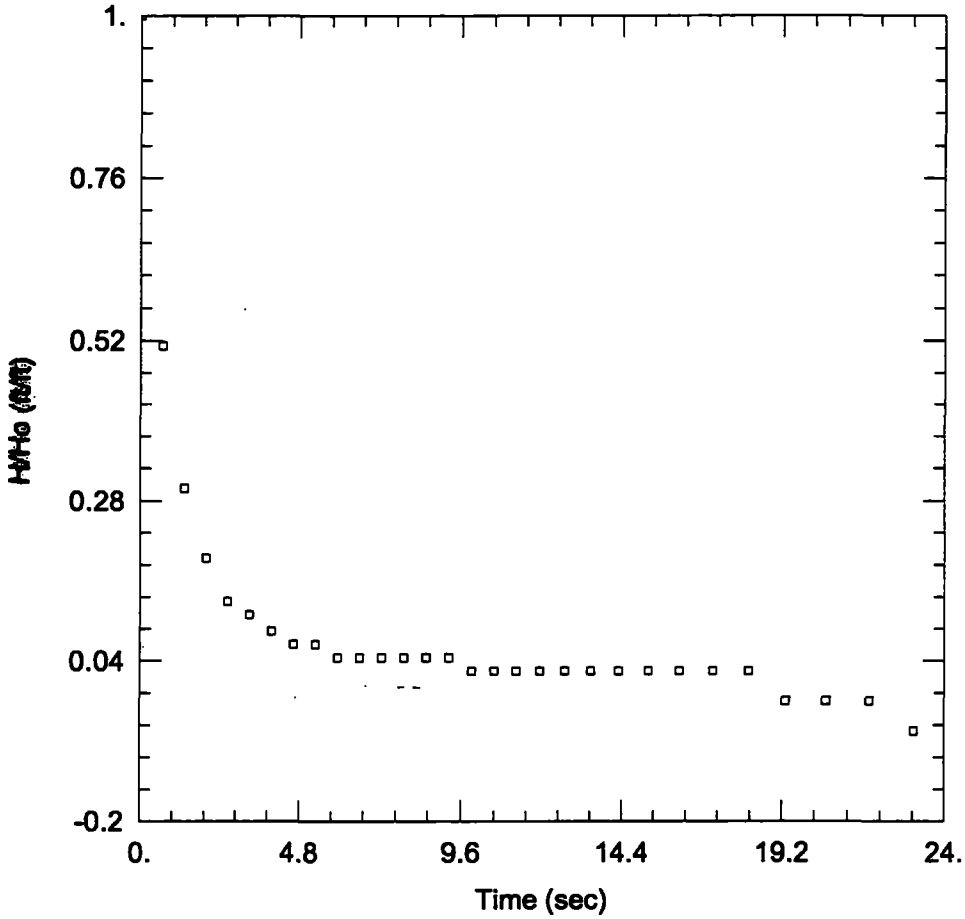
Saturated Thickness: 1. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-11S SI)

Initial Displacement: 0.162 ft
Total Well Penetration Depth: 1.09 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 1.09 ft
Screen Length: 1.09 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 309.8 ft/day
Le = 6.271 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-11S SO.aqt
Date: 07/17/06 Time: 14:54:39

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-11S SO
Test Date: 4/13/2006

AQUIFER DATA

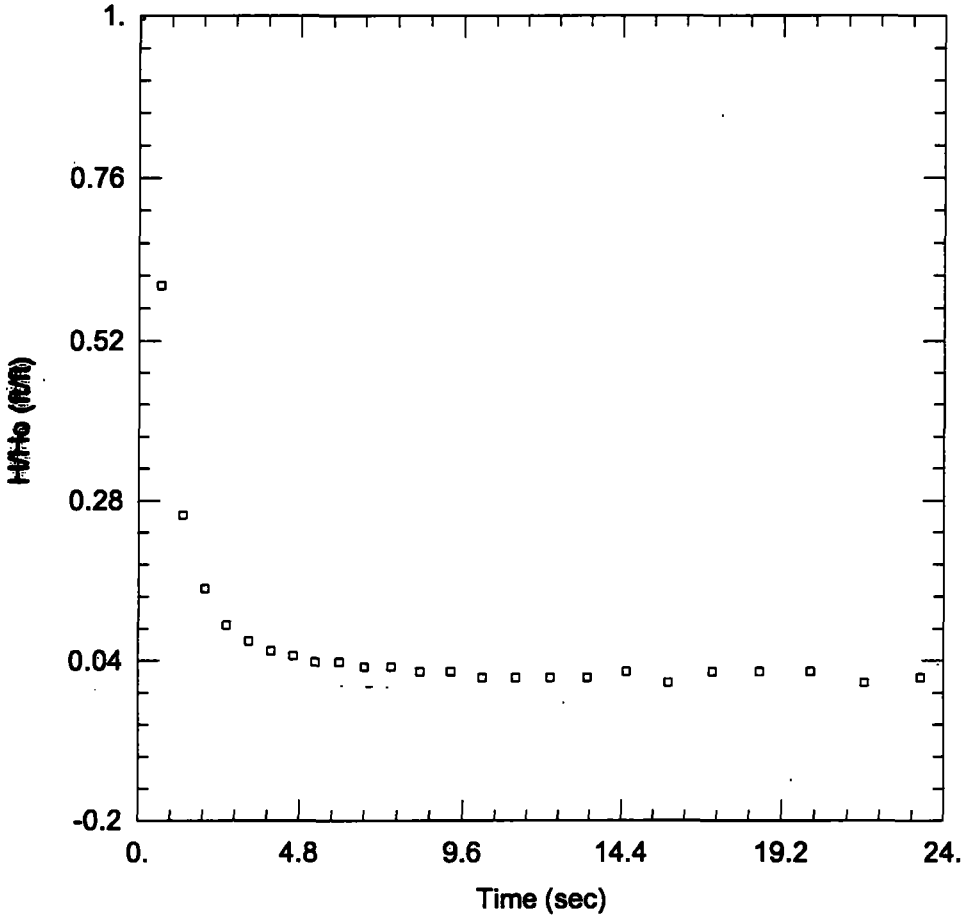
Saturated Thickness: 1. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-11S SO)

Initial Displacement: 0.201 ft
Total Well Penetration Depth: 1.09 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 1.09 ft
Screen Length: 1.09 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 303.3 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-12S SI.aqt
Date: 07/17/06 Time: 14:55:16

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-12S SI
Test Date: 4/13/2006

AQUIFER DATA

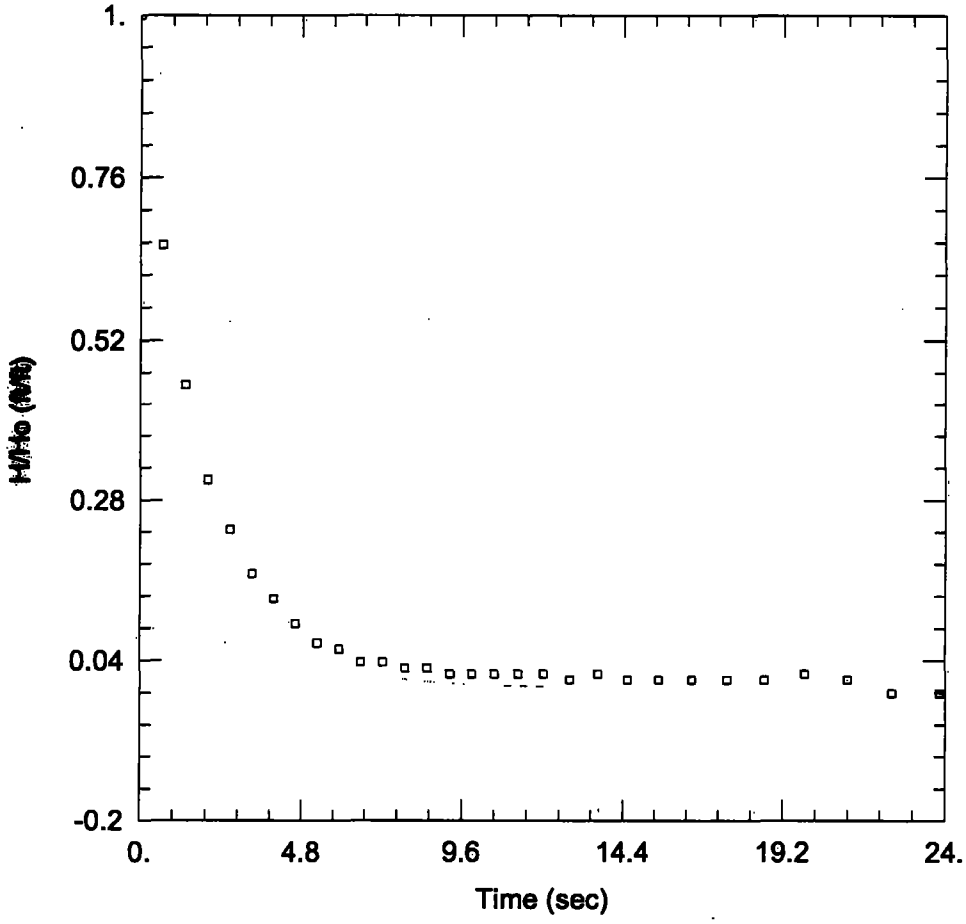
Saturated Thickness: 3. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-12S SI)

Initial Displacement: 0.547 ft
Total Well Penetration Depth: 1.94 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 1.94 ft
Screen Length: 1.94 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 203.8 ft/day
Le = 3.42 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-12S SO.aqt
Date: 07/17/06 Time: 14:55:36

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-12S SO
Test Date: 4/13/2006

AQUIFER DATA

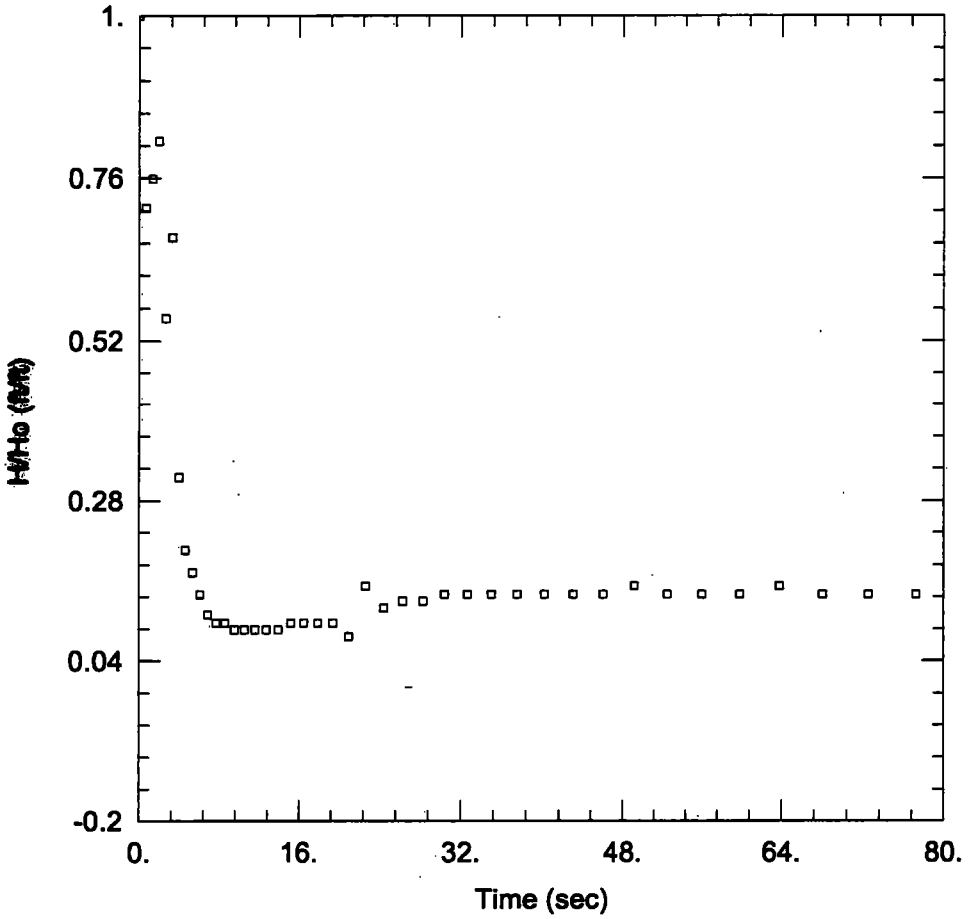
Saturated Thickness: 3. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-12S SO)

Initial Displacement: 0.454 ft
Total Well Penetration Depth: 1.94 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 1.94 ft
Screen Length: 1.94 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 127. ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14S SI 1.aqt
Date: 07/17/06 Time: 17:14:53

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14S SI 1
Test Date: 4/10/2006

AQUIFER DATA

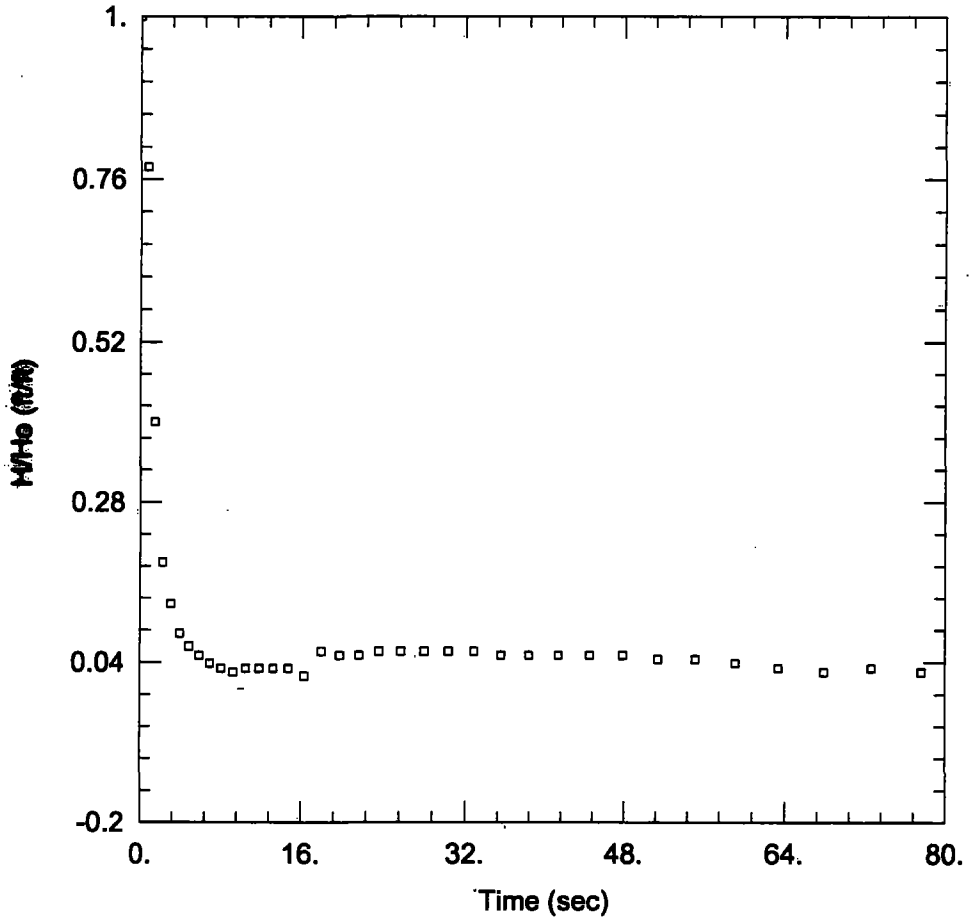
Saturated Thickness: 4.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-14S SI 1)

Initial Displacement: 0.394 ft
Total Well Penetration Depth: 5.94 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 5.94 ft
Screen Length: 5.94 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 32.74 ft/day
Le = 7.962 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14S SI 2.aqt
Date: 07/17/06 Time: 17:15:31

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14S SI 2
Test Date: 4/10/2006

AQUIFER DATA

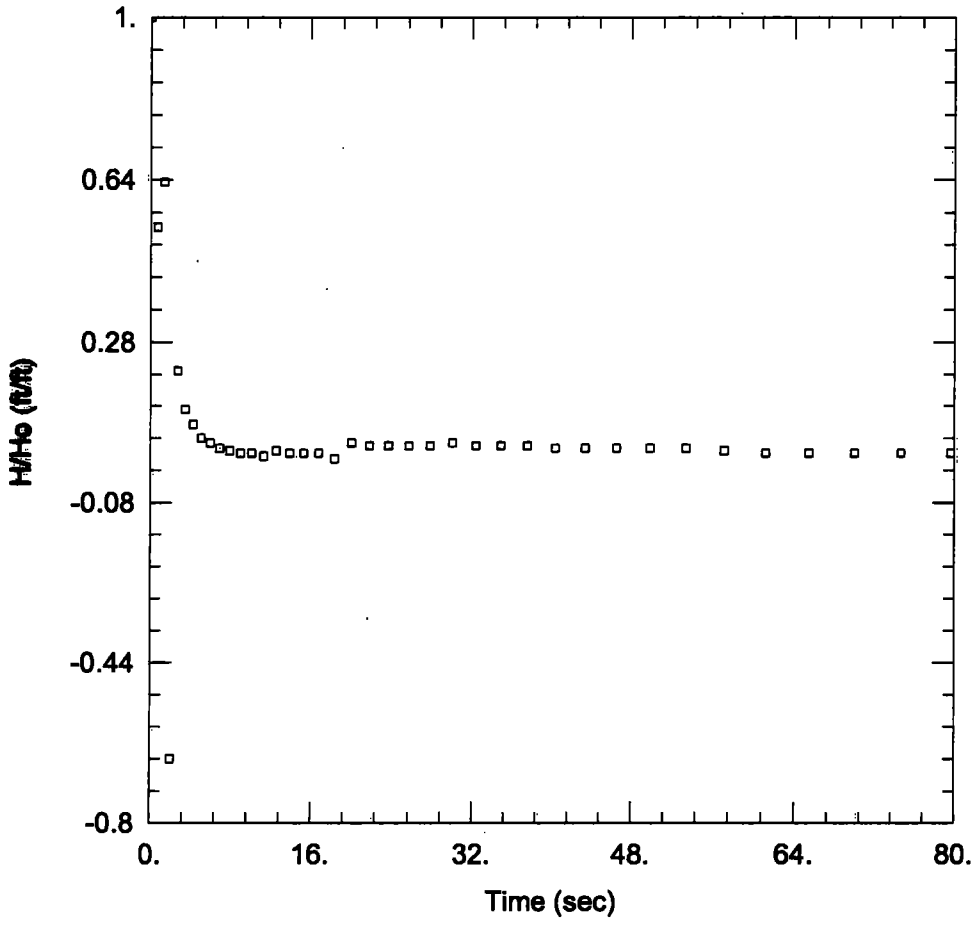
Saturated Thickness: 4.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-14S SI 2)

Initial Displacement: 0.676 ft
Total Well Penetration Depth: 5.94 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 5.94 ft
Screen Length: 5.94 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 84.43 ft/day
Le = 13.9 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14S SI 3.aqt
Date: 07/17/06 Time: 14:58:10

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14S SI 3
Test Date: 4/10/2006

AQUIFER DATA

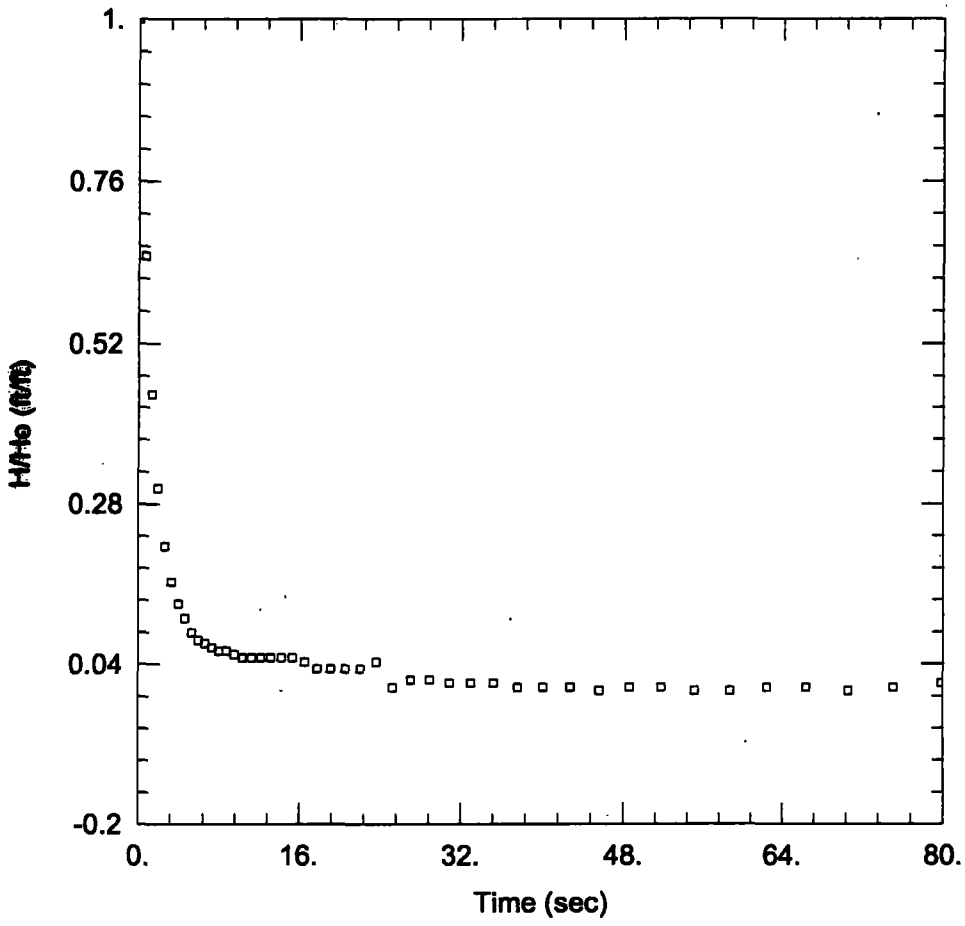
Saturated Thickness: 4.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-14S SI 3)

Initial Displacement: 0.736 ft
Total Well Penetration Depth: 5.94 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 5.94 ft
Screen Length: 5.94 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 196.9 ft/day
Le = 13.56 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14S SO 1.aqt
Date: 07/17/06 Time: 17:16:20

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14S SO 1
Test Date: 4/10/2006

AQUIFER DATA

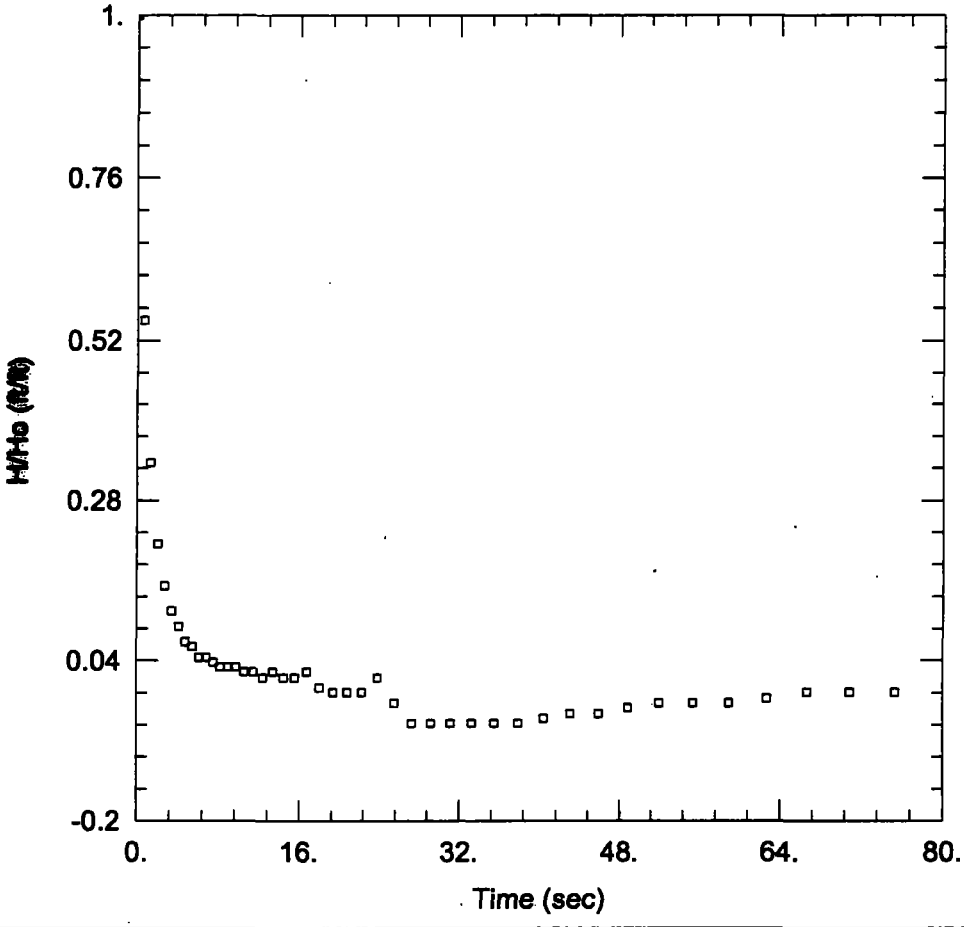
Saturated Thickness: 4.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-14S SO 1)

Initial Displacement: 0.792 ft
Total Well Penetration Depth: 5.94 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 5.94 ft
Screen Length: 5.94 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 75.26 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14S SO 2.aqt
Date: 07/17/06 Time: 17:16:55

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14S SO 2
Test Date: 4/10/2006

AQUIFER DATA

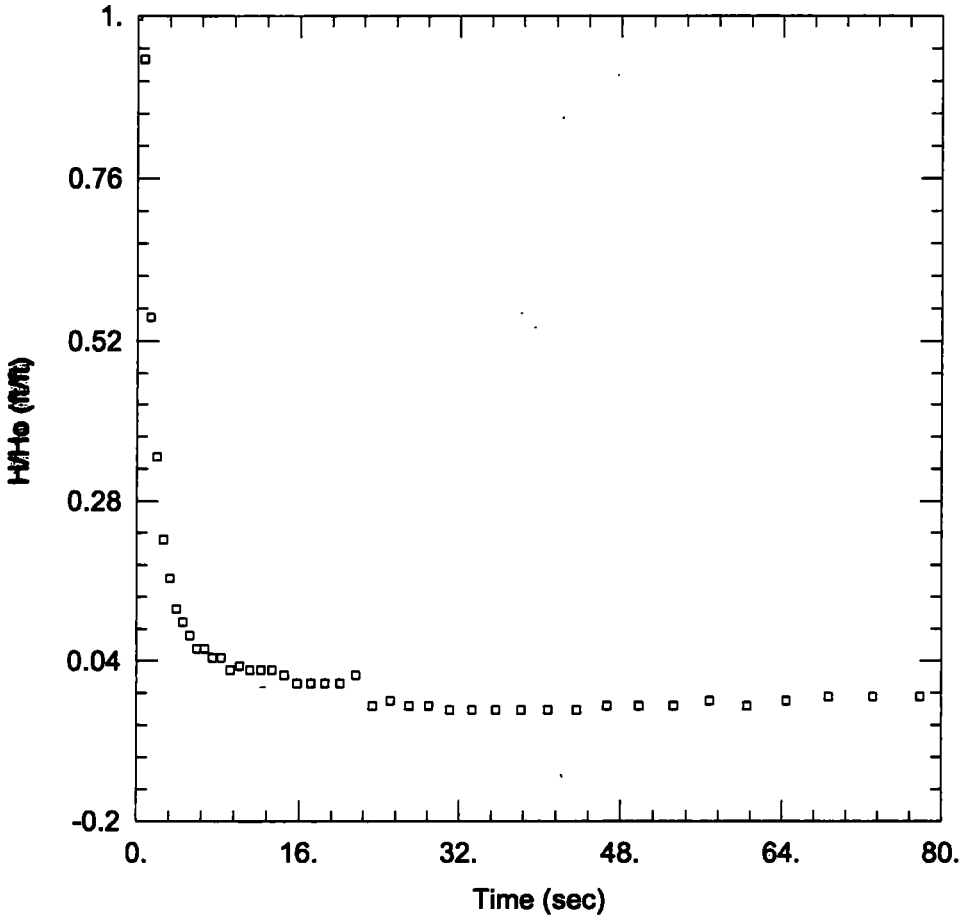
Saturated Thickness: 4.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-14S SO 2)

Initial Displacement: 0.56 ft
Total Well Penetration Depth: 5.94 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 5.94 ft
Screen Length: 5.94 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 99.95 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14S SO 3.aqt
Date: 07/17/06 Time: 17:17:33

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14S SO 3
Test Date: 4/10/2006

AQUIFER DATA

Saturated Thickness: 4.5 ft
Anisotropy Ratio (Kz/Kr): 1.

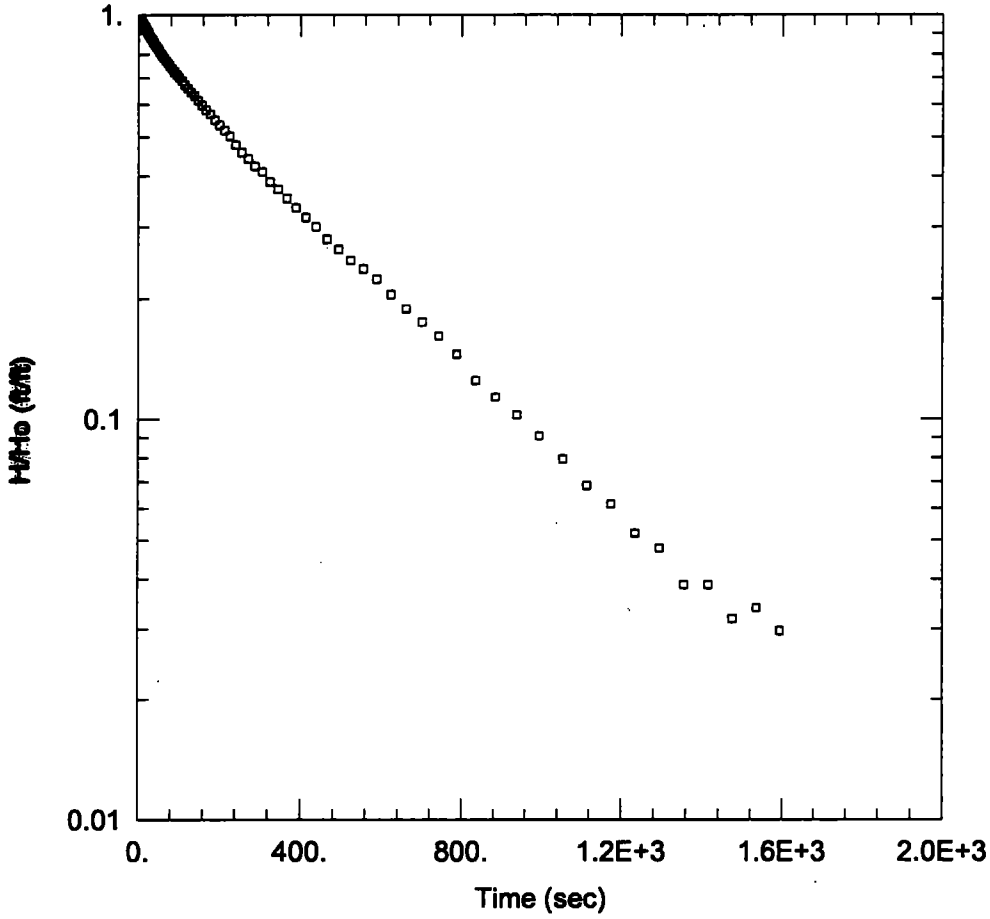
WELL DATA (MW-14S SO 3)

Initial Displacement: 0.654 ft
Total Well Penetration Depth: 5.94 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 5.94 ft
Screen Length: 5.94 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar

K = 67.08 ft/day
Le = 22.96 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14M SI 1.aqt
Date: 07/10/06 Time: 11:05:08

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14M SI 1
Test Date: 4/10/2006

AQUIFER DATA

Saturated Thickness: 27. ft Anisotropy Ratio (Kz/Kr): 1.

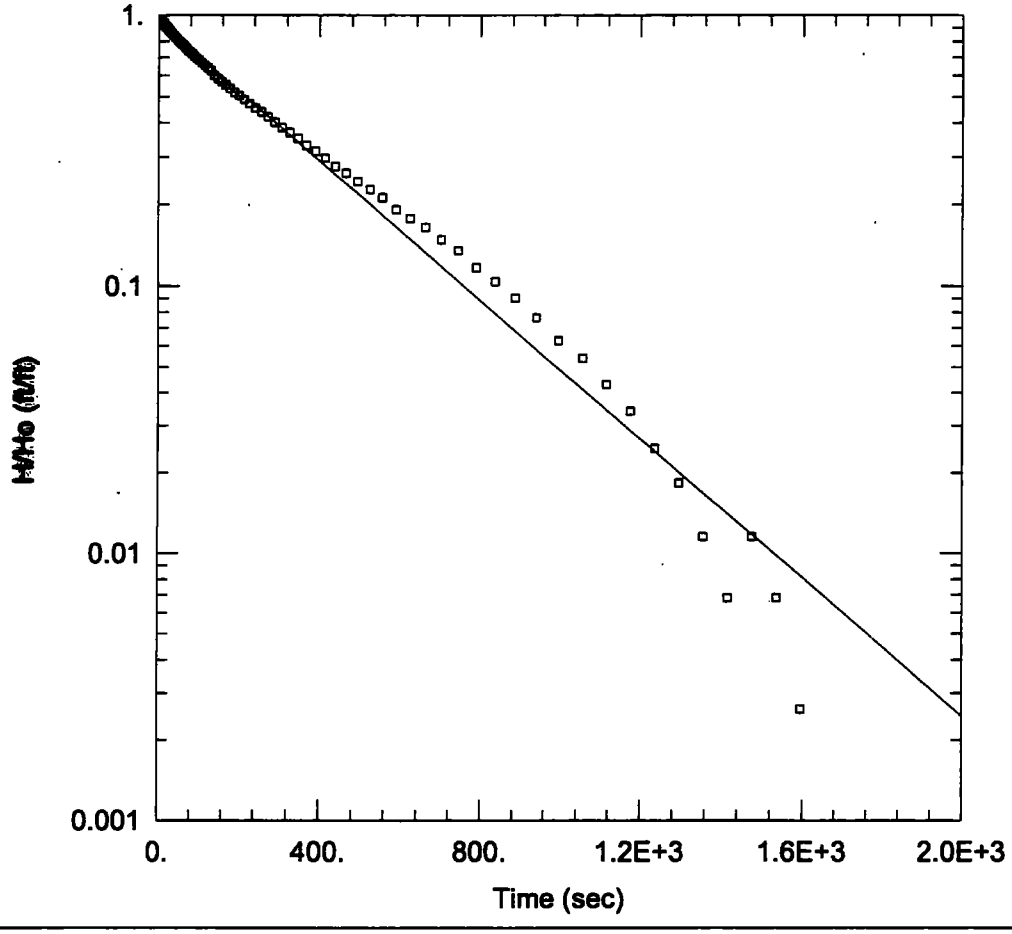
WELL DATA (MW-14M SI 1)

Initial Displacement: 1.886 ft
Total Well Penetration Depth: 26.49 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 26.49 ft
Screen Length: 8. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.3168 ft/day y0 = 1.807 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14M SI 2.aqt
Date: 07/10/06 Time: 11:04:55

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14M SI 2
Test Date: 4/11/2006

AQUIFER DATA

Saturated Thickness: 27. ft
Anisotropy Ratio (Kz/Kr): 1.

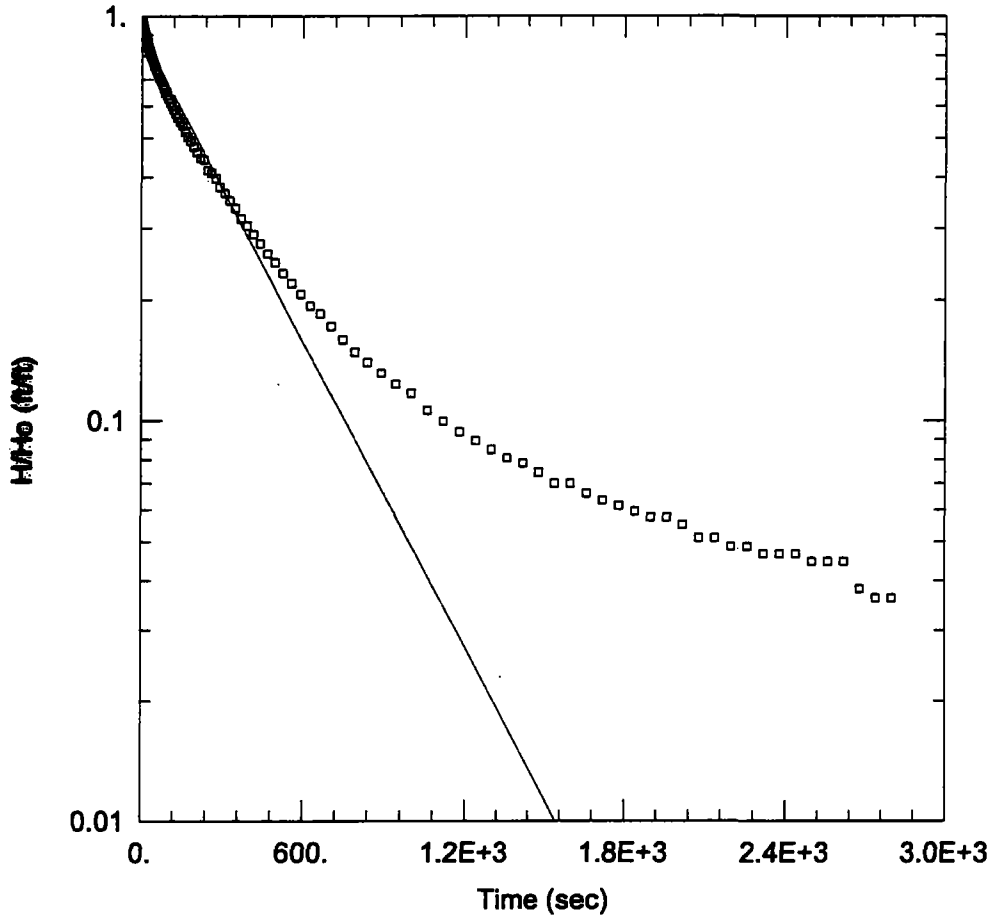
WELL DATA (MW-14M SI 2)

Initial Displacement: 1.91 ft
Total Well Penetration Depth: 26.35 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 26.35 ft
Screen Length: 8. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.3351 ft/day
y0 = 1.82 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14M SO 1.aqt
Date: 07/10/06 Time: 11:04:45

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14M SO 1
Test Date: 4/10/2006

AQUIFER DATA

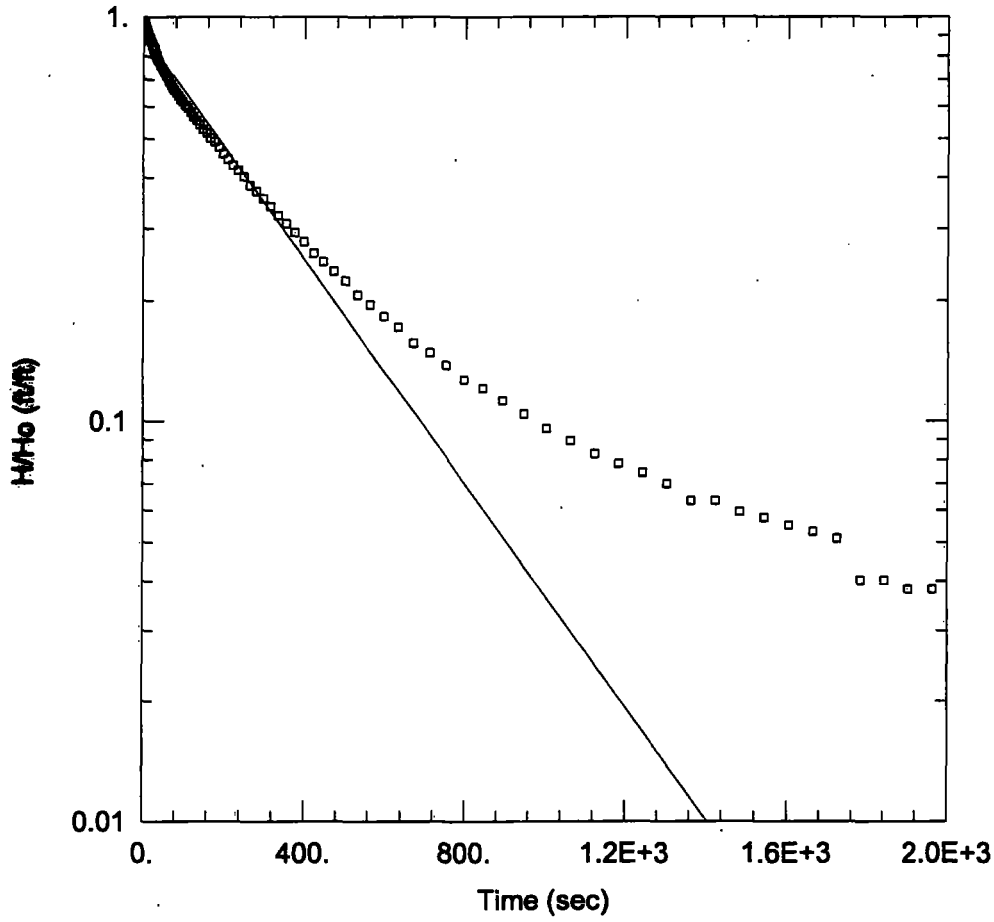
Saturated Thickness: 27. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-14M SO 1)

Initial Displacement: 2.018 ft
Total Well Penetration Depth: 26.49 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 26.49 ft
Screen Length: 8. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.3144 ft/day
y0 = 1.825 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-14M SO 2.aqt
Date: 07/10/06 Time: 11:04:33

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: MW-14M SO 2
Test Date: 4/11/2006

AQUIFER DATA

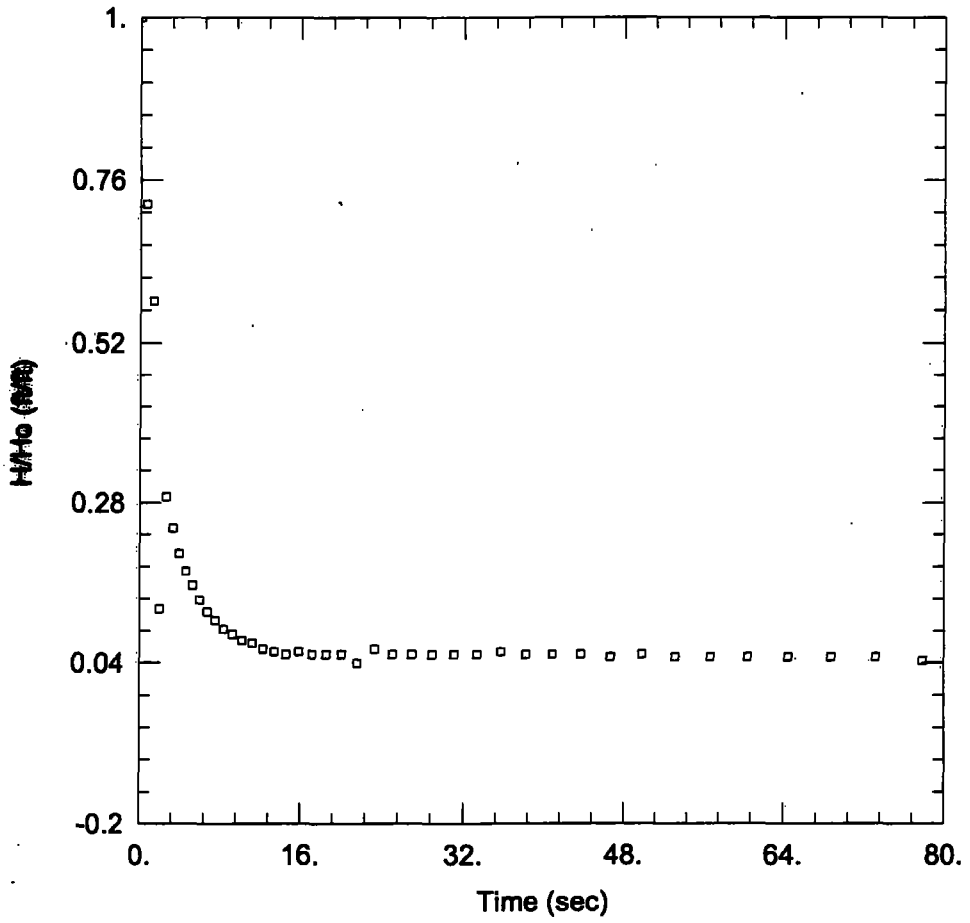
Saturated Thickness: 27. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-14M SO 2)

Initial Displacement: 2.016 ft
Total Well Penetration Depth: 26.35 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 26.35 ft
Screen Length: 8. ft
Well Radius: 0.427 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.3421 ft/day
y0 = 1.833 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-15S SI 1.aqt
Date: 07/17/06 Time: 17:20:00

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-15 SI 1
Test Date: 4/10/2006

AQUIFER DATA

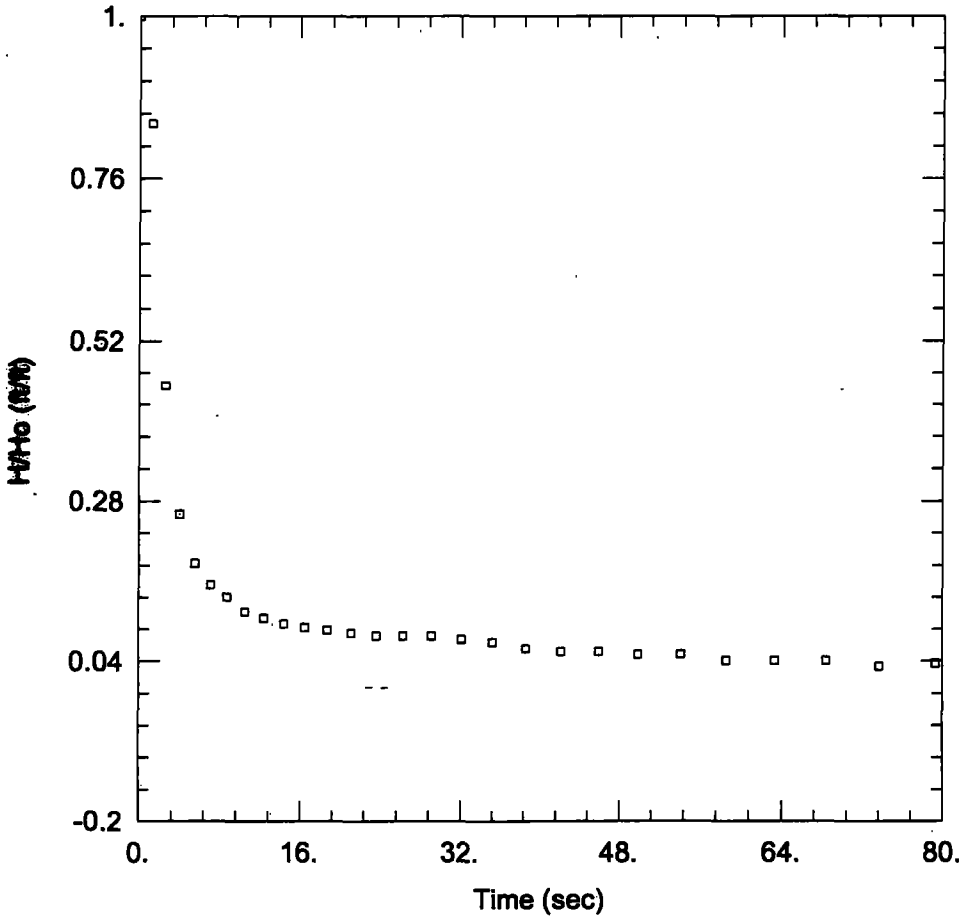
Saturated Thickness: 7. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-15S SI 1)

Initial Displacement: 0.994 ft
Total Well Penetration Depth: 7.04 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 7.04 ft
Screen Length: 7.04 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 55.06 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-15S SI 2.aqt
Date: 07/17/06 Time: 17:20:34

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-15 SI 2
Test Date: 4/11/2006

AQUIFER DATA

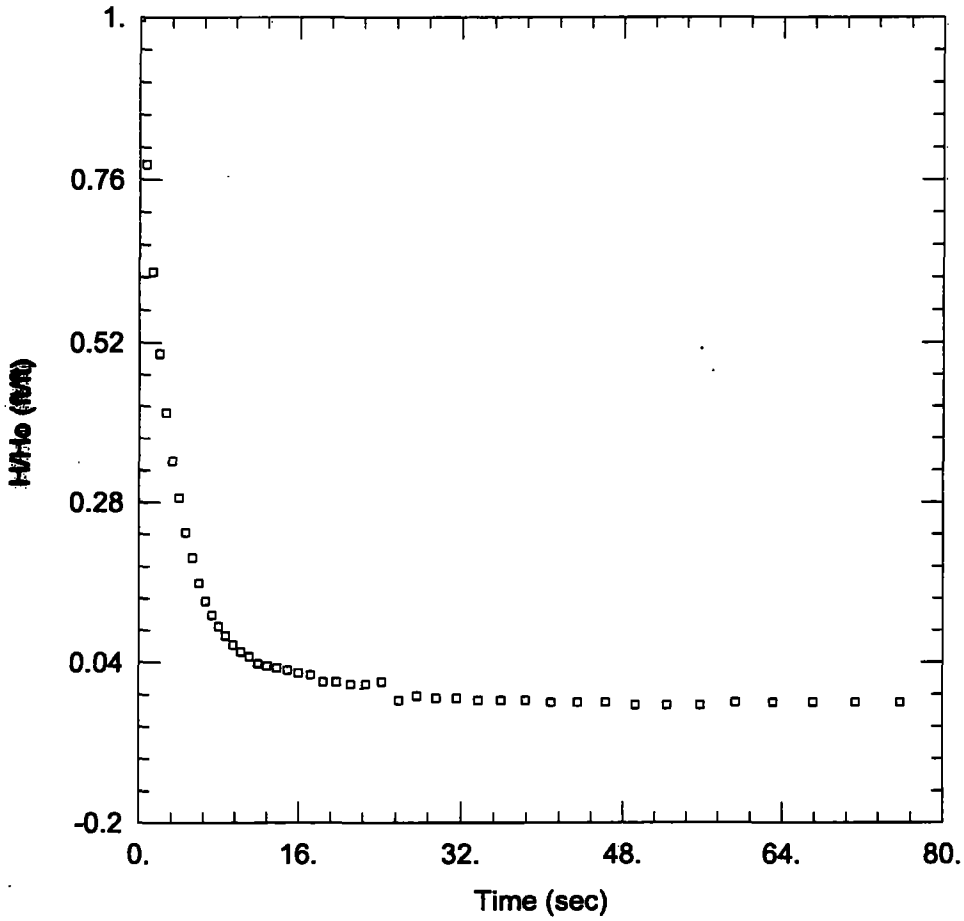
Saturated Thickness: 7. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-15S SI 2)

Initial Displacement: 0.937 ft
Total Well Penetration Depth: 7.01 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 7.01 ft
Screen Length: 7.01 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 32.25 ft/day
Le = 35.59 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-15S SO 1.aqt
Date: 07/17/06 Time: 17:21:16

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-15 SO 1
Test Date: 4/10/2006

AQUIFER DATA

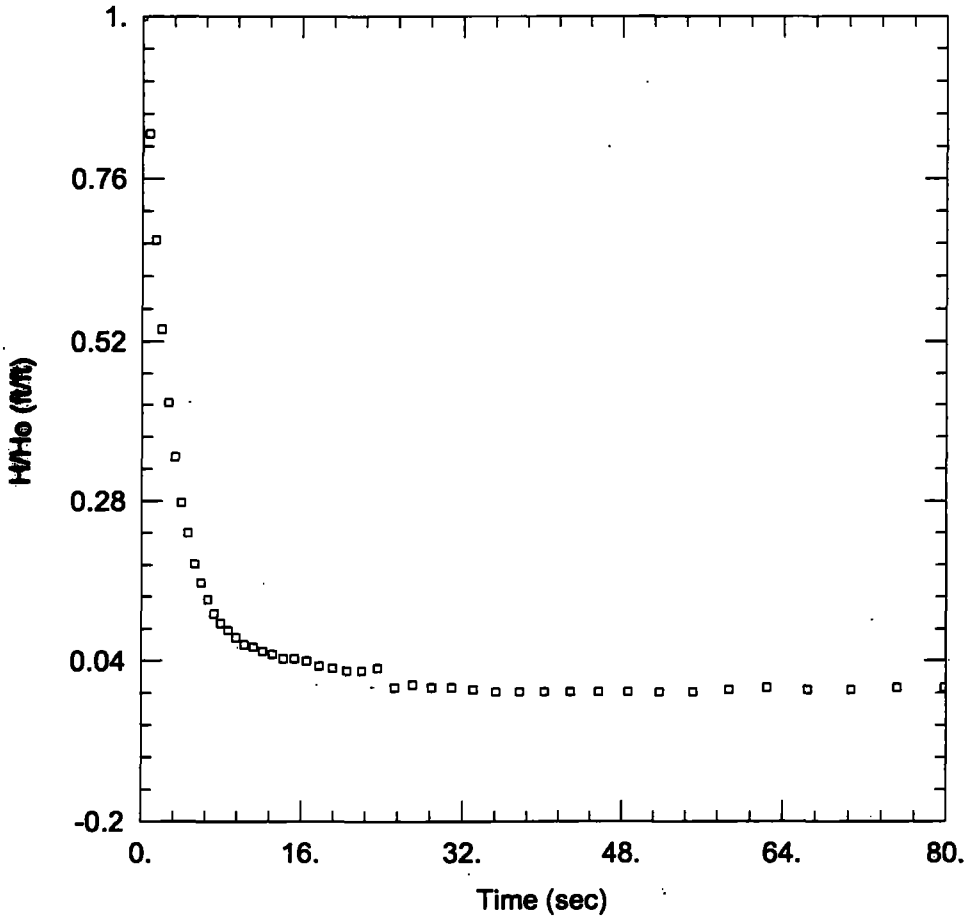
Saturated Thickness: 7. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-15S SO 1)

Initial Displacement: 1.242 ft
Total Well Penetration Depth: 7.04 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 7.04 ft
Screen Length: 7.04 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 38.16 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-15S SO 2.aqt
Date: 07/17/06 Time: 17:21:50

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-15 SO 2
Test Date: 4/11/2006

AQUIFER DATA

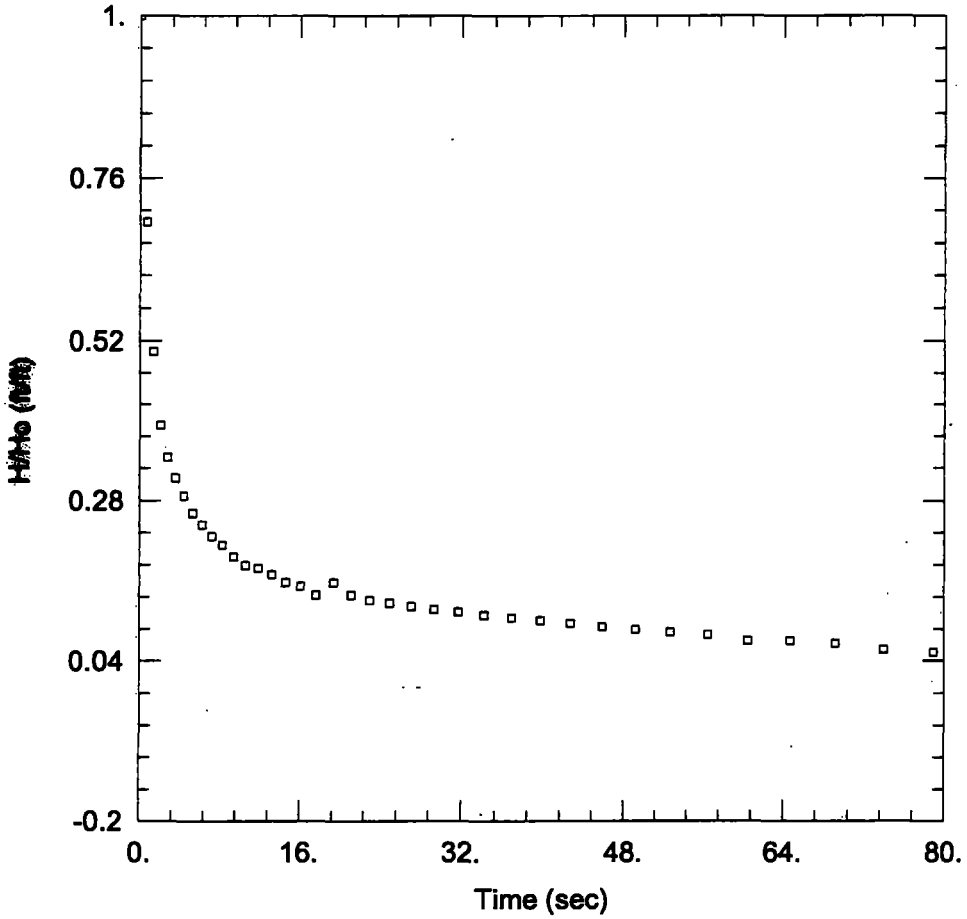
Saturated Thickness: 7. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-15S SO 2)

Initial Displacement: 1.203 ft
Total Well Penetration Depth: 7.01 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 7.01 ft
Screen Length: 7.01 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 36.87 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-16S SI 1.aqt
Date: 07/17/06 Time: 17:22:31

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-16 SI 1
Test Date: 4/10/2006

AQUIFER DATA

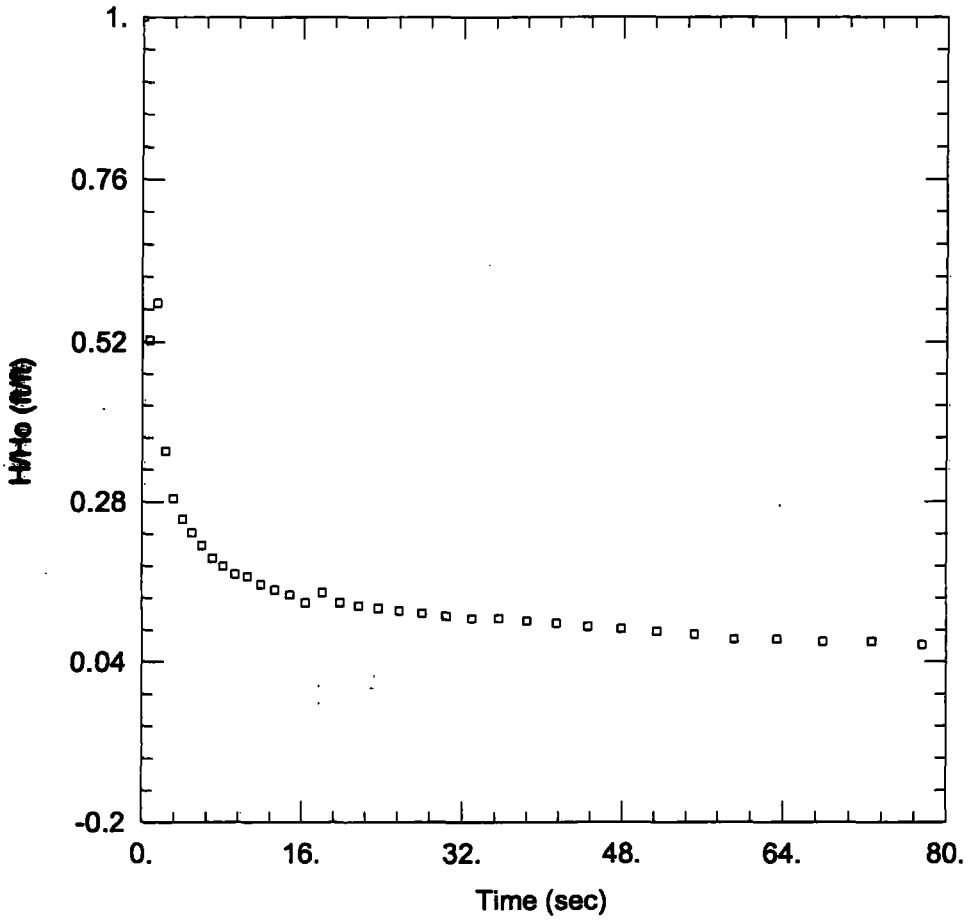
Saturated Thickness: 6.3 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-16S SI 1)

Initial Displacement: 0.985 ft
Total Well Penetration Depth: 6.29 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.29 ft
Screen Length: 6.29 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 35.19 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-16S SI 2.aqt
Date: 07/17/06 Time: 17:23:09

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-16 SI 2
Test Date: 4/11/2006

AQUIFER DATA

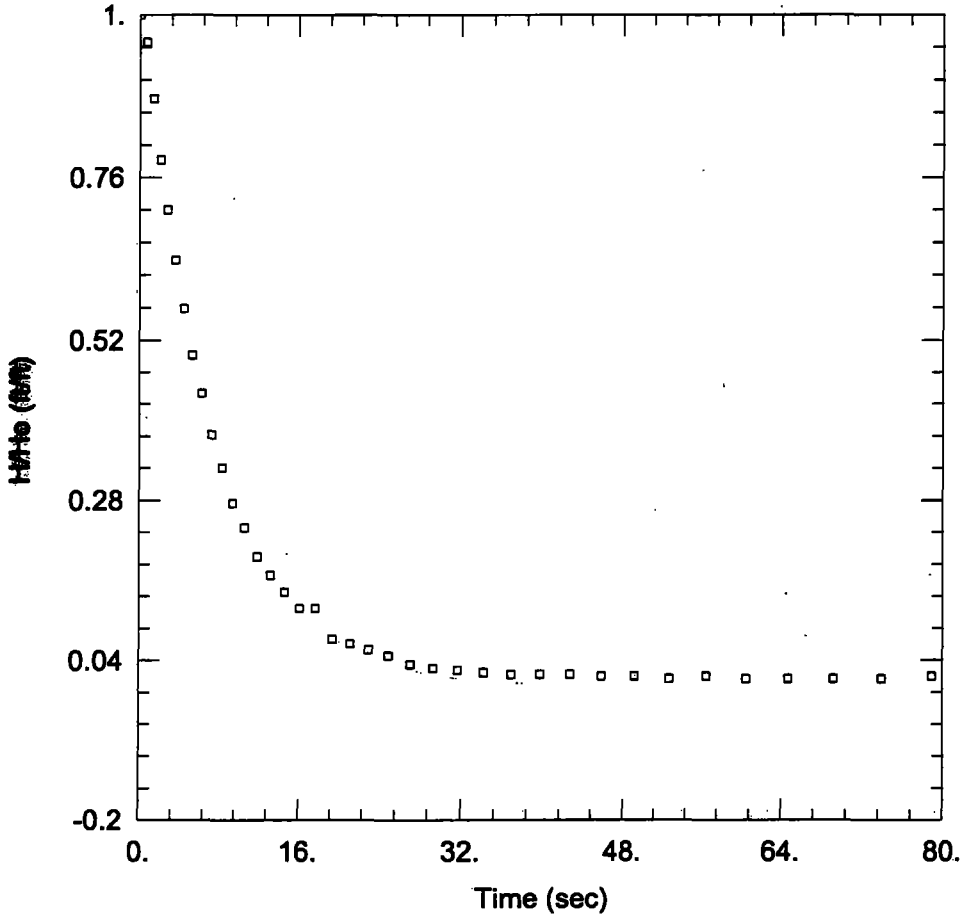
Saturated Thickness: 6.3 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-16S SI 2)

Initial Displacement: 1.096 ft
Total Well Penetration Depth: 6.27 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.27 ft
Screen Length: 6.27 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 41.1 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-16S SO 1.aqt
Date: 07/17/06 Time: 17:23:48

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-16 SO 1
Test Date: 4/10/2006

AQUIFER DATA

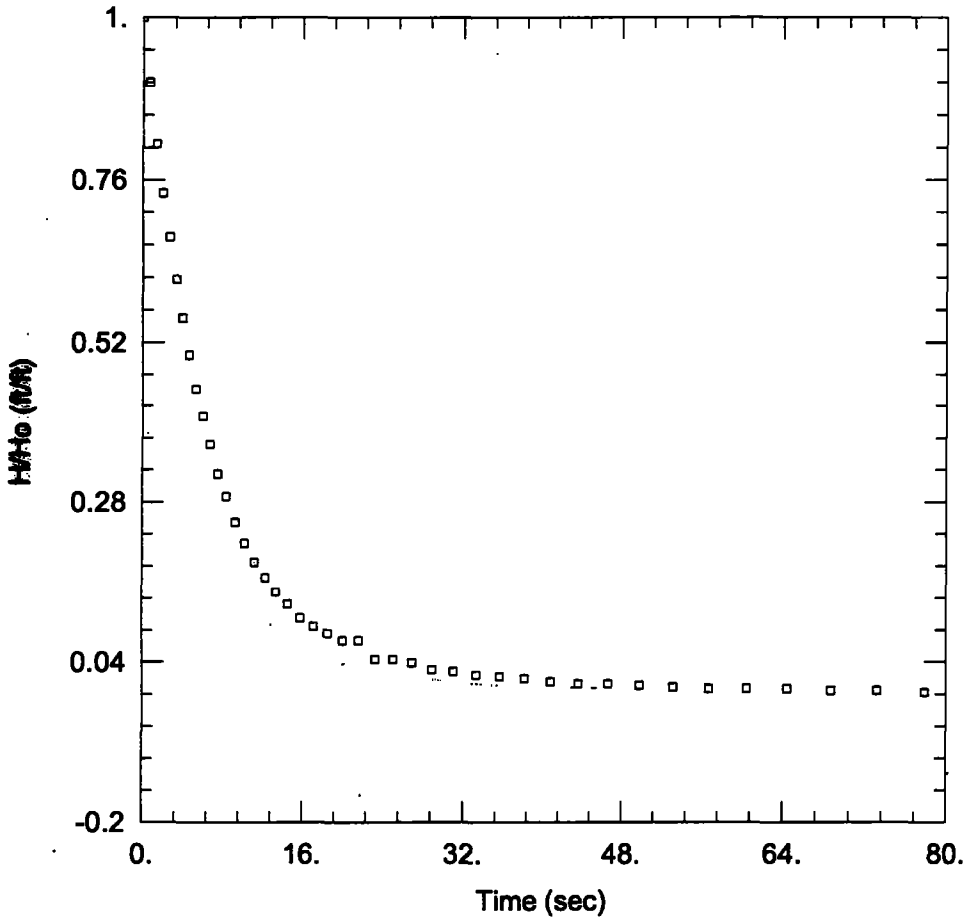
Saturated Thickness: 6.3 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-16S SO 1)

Initial Displacement: 1.383 ft
Total Well Penetration Depth: 6.29 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.29 ft
Screen Length: 6.29 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 18.09 ft/day
Le = 73.15 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-16S SO 2.aqt
Date: 07/17/06 Time: 17:24:23

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-16 SO 2
Test Date: 4/11/2006

AQUIFER DATA

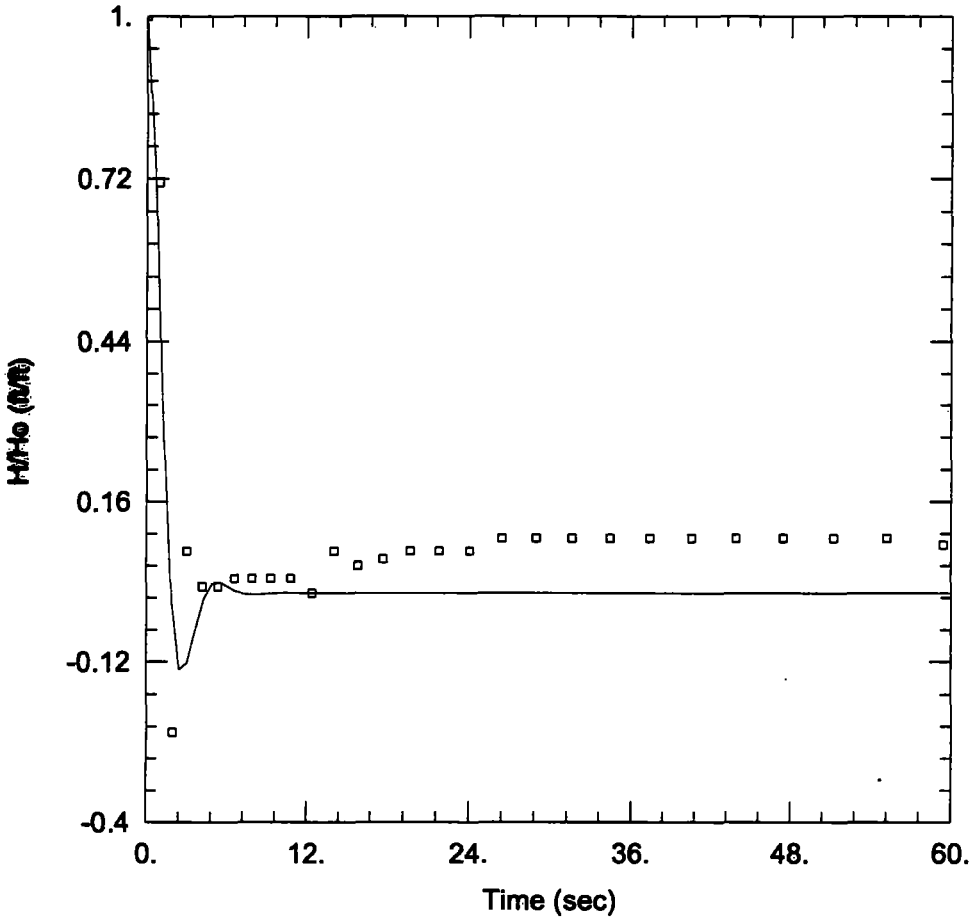
Saturated Thickness: 6.3 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-16S SO 2)

Initial Displacement: 1.647 ft
Total Well Penetration Depth: 6.27 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.27 ft
Screen Length: 6.27 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 19.47 ft/day
Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-18S SI 1.aqt
Date: 07/17/06 Time: 14:59:31

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-18 SI 1
Test Date: 4/10/2006

AQUIFER DATA

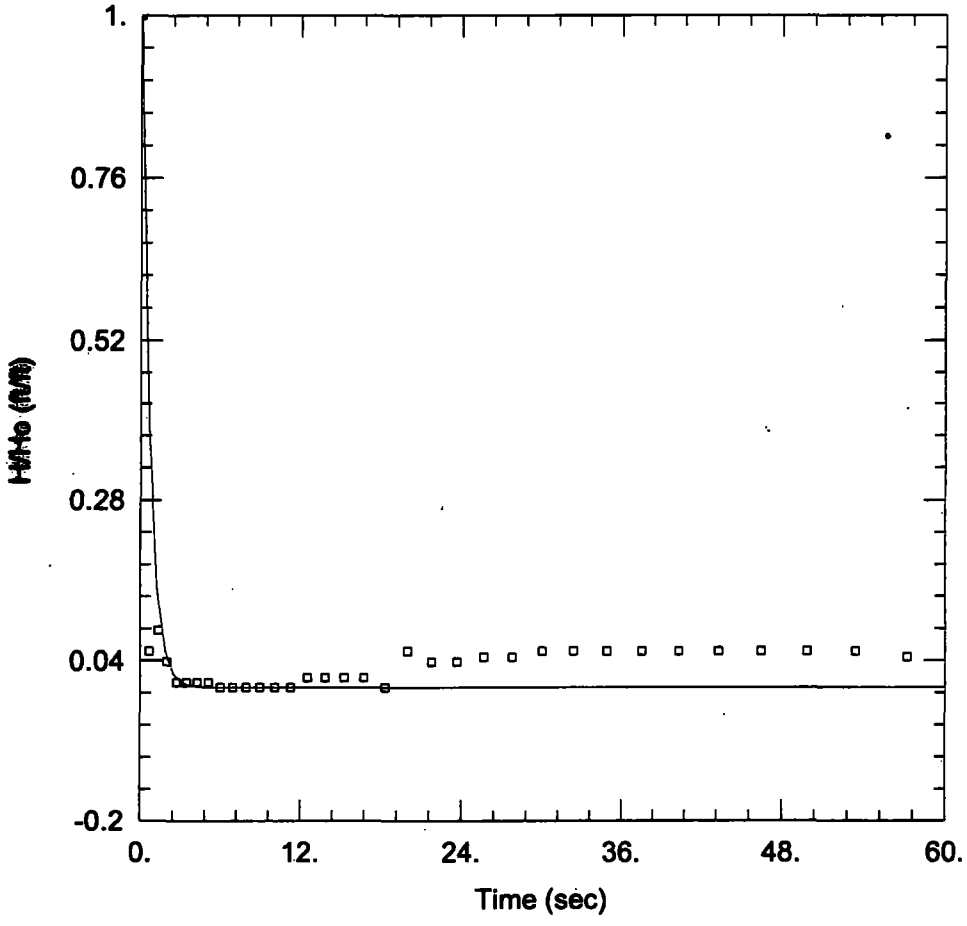
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-18S SI 1)

Initial Displacement: 0.355 ft
Total Well Penetration Depth: 6.12 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.12 ft
Screen Length: 6.12 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 143.3 ft/day
Le = 15.9 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-18S SI 2.aqt
Date: 07/17/06 Time: 14:59:54

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-18 SI 2
Test Date: 4/10/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

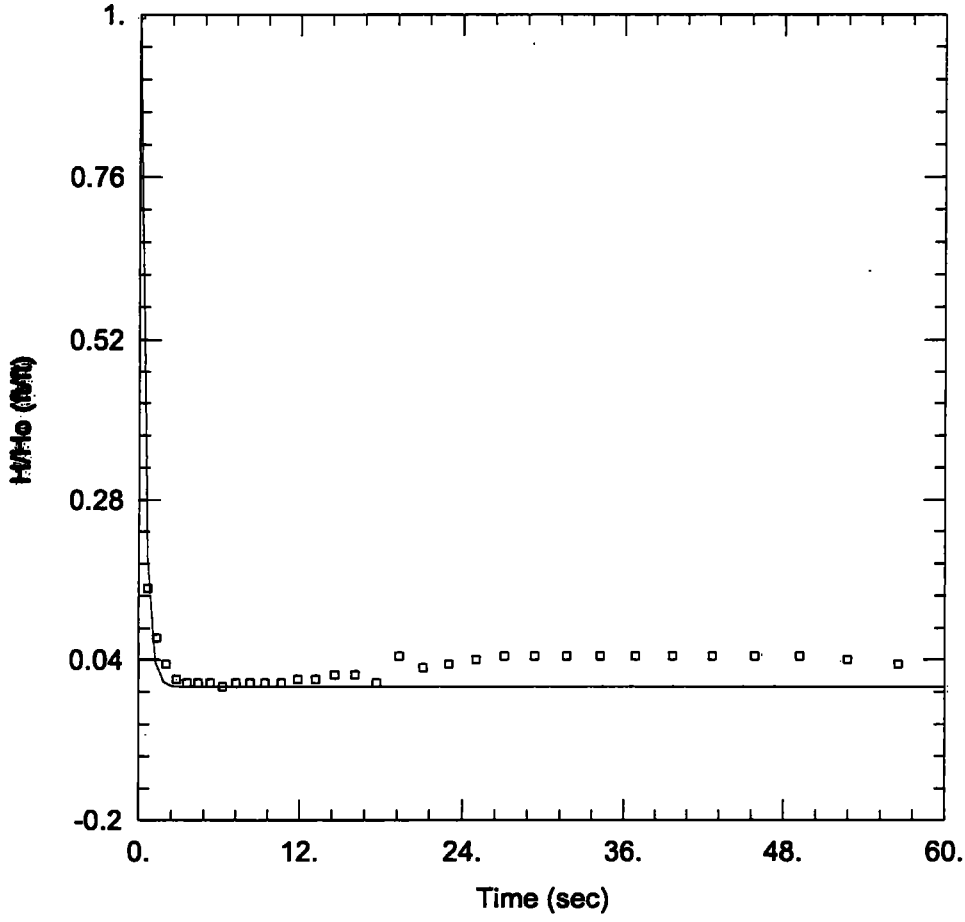
WELL DATA (MW-18S SI 2)

Initial Displacement: 0.552 ft
Total Well Penetration Depth: 6.12 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.12 ft
Screen Length: 6.12 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 171.3 ft/day Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-18S SI 3.aqt
Date: 07/17/06 Time: 15:00:16

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-18 SI 3
Test Date: 4/10/2006

AQUIFER DATA

Saturated Thickness: 100. ft Anisotropy Ratio (Kz/Kr): 1.

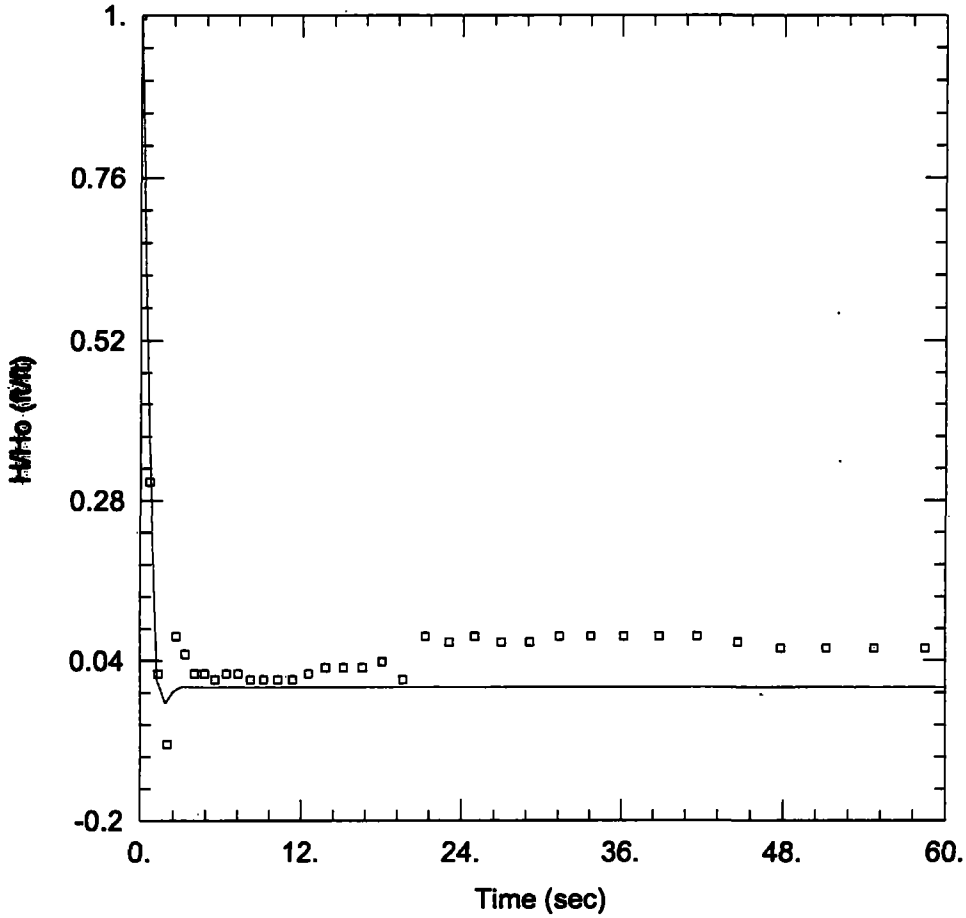
WELL DATA (MW-18S SI 3)

Initial Displacement: 0.753 ft
Total Well Penetration Depth: 6.12 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.12 ft
Screen Length: 6.12 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Springer-Gelhar

K = 289.6 ft/day Le = 0.1 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-18S SI 4.aqt
Date: 07/17/06 Time: 15:00:41

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-18 SI 4
Test Date: 4/11/2006

AQUIFER DATA

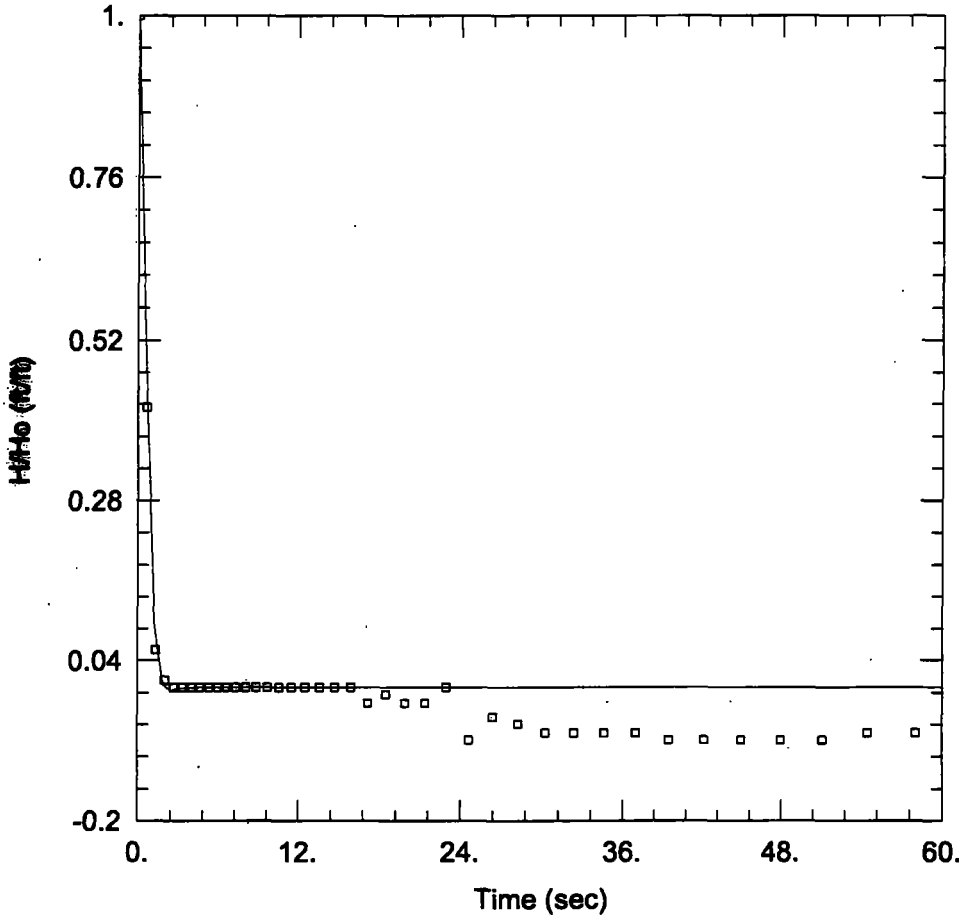
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-18S SI 4)

Initial Displacement: 0.445 ft
Total Well Penetration Depth: 6.1 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.1 ft
Screen Length: 6.1 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 209.3 ft/day
Le = 3.69 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-18S SO 1.aqt
Date: 07/17/06 Time: 15:01:07

PROJECT INFORMATION

Company: ENSR
Client: AK Steel
Project: 00076-069
Location: New Miami, OH
Test Well: SMW-18 SO 1
Test Date: 4/10/2006

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-18S SO 1)

Initial Displacement: 0.377 ft
Total Well Penetration Depth: 6.12 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 6.12 ft
Screen Length: 6.12 ft
Well Radius: 0.177 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
K = 168.5 ft/day
Le = 4.317 ft